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ABSTRACT

The biennial statewide plan for higher education in Virginia outlines the status of the state system and proposes academic and administrative actions to move the system forward through the next two years and beyond. The first section gives a statistical profile of the state system, including private and public college and university enrollment distributions, selected student characteristics, state appropriations, space needs, degrees conferred, and faculty tenure and rank distribution by institution. The second section presents three issue papers on current concerns and interests in Virginia higher education, each making suggestions for policy and administration. These include "Building upon Progress: Goals for Virginia Higher Education 1988-90," "Virginia's Academic Libraries in the Age of Information Technology," and "Report on Student Assessment." A series of institutional narratives follows, one for each public and independent higher education institution in the state, including two-year colleges. The booklet is copiously illustrated with black and white photographs. (MSE)

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The Virginia Plan for Higher Education 1987

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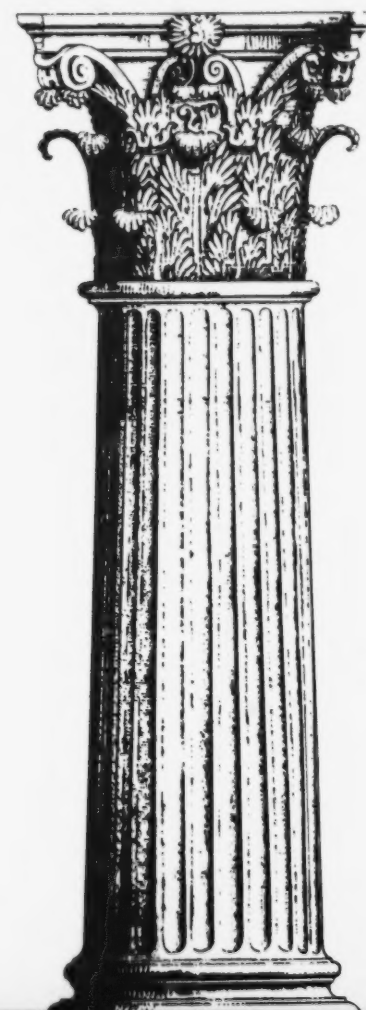
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Introduction

The Council of Higher Education is required by law to publish a statewide plan for higher education and to revise that plan every two years. It has done so since 1974.

In 1974, the Council of Higher Education set three goals for Virginia's system of higher education: access, excellence and accountability. The Council reaffirms its commitment to these goals in issuing this revision to the **Virginia Plan**. The Council also reaffirms its commitment to a fourth goal, set in 1985: **to place Virginia's colleges and universities among the best systems of higher education in the nation.**

Since 1985, we have seen Virginia higher education continue its rapid progress toward the goals set by the Council. Strong support from Governors and the General Assembly has put Virginia among the leading states in appropriation increases. A number of special initiatives have been funded to build upon particular strengths of individual colleges and universities. A new program of Outstanding Faculty Awards recognizes the indispensable contributions of the women and men who teach and conduct research and scholarship in our institutions, both public and private.

As Governor Gerald L. Baliles said in his opening address to the 1988 General Assembly, "Virginia higher education is on a roll—and I think we ought to keep it moving." The Council of Higher Education agrees with the Governor's assessment and strongly supports his proposal.

The many virtues of Virginia higher education have been enumerated often enough. But it is important to emphasize that the bedrock of higher education in the Commonwealth is undergraduate education. State and national concerns for economic competitiveness tend often to



focus upon graduate programs, advanced technology, and research that might yield marketable products. These things are important, but the preparation of a responsible, adaptable, and skilled citizenry is the most important contribution higher education can make to the economic development of Virginia. The rest of higher education's activities should follow, and never drain resources from, the undergraduate programs.

For decades, Virginia played catch-up in higher education. Like other southern states, it lagged far behind the nation in the money it provided to its colleges and universities, and in what it expected of them.

The catch-up era has past, and we now are able to think about what tomorrow will bring: new problems, opportunities, students, and possibly even new forms of academic organization itself. To take just one example, technology will markedly change the way the information resources of our society—including academic libraries—are used in scholarship and learning. It can extend the capacities of administrators, freeing staff positions for more teachers and smaller classes.

Used properly, as it often has not been in the past, technology will expand higher education's ability to deliver instruction throughout the state and nation. The televised graduate engineering program is just a first step in this direction, but it has grown to include over 2700 enrollments at five locations, with three more coming on-line next year.

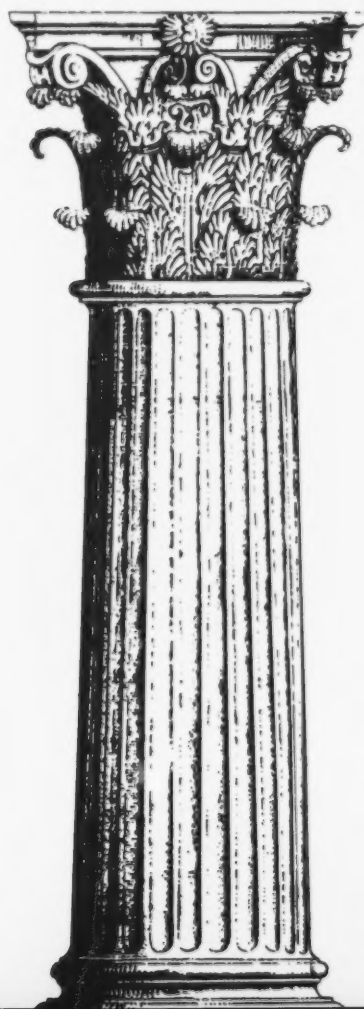
Those persons responsible for Virginia higher education have to think about tomorrow in everything they do on behalf of our colleges and universities. Copying old models will not suffice to prepare for the next century. In this revision



of the Virginia Plan for Higher Education, the Council proposes actions that will continue the Commonwealth's progress toward placing its colleges and universities among the best systems of higher education in the nation. We commend the leaders of Virginia for supporting higher education so well, especially in the last few years. Because we are working together, our efforts are bearing fruit. We look forward to great progress in the next few years.

S.E. Harrison
Chairman,
State Council of Higher
Education for Virginia

The Virginia System of Higher Education —A Statistical Profile



THE VIRGINIA SYSTEM: INTRODUCTION

The Virginia system of higher education includes 39 state-supported institutions and 40 independent institutions, six of which are proprietary institutions that award degrees. The system also has 33 institutions of higher education whose principal campuses are located outside the Commonwealth but are approved to offer courses and degree programs within the state. In addition, there are more than 150 other institutions, mostly proprietary schools, that provide postsecondary training to Virginia students and offer certificates or diplomas to their graduates.

One special characteristic of the Virginia system is its diversity. There are public and independent institutions which admit only a small percentage of applicants. There are other institutions that provide access to virtually all citizens who can benefit from attendance.

The Virginia Plan for Higher Education concentrates on the 79 degree-granting institutions which have been chartered or established by statute by the Commonwealth. This chapter provides an overview of the colleges and universities that collectively form one of the most diverse—and increasingly excellent—systems of higher education in the nation.

HIGHER EDUCATION IN VIRGINIA AND THE NATION

Virginia's public system of higher education enrolled more than 275,000 headcount students in Fall 1987. The system's full-time-equivalent enrollment, about 193,000, is the 11th largest public system in the nation. Virginia's independent system nationally is 19th in FTE enrollment, at about 40,000. Over 44,000 headcount



students are enrolled in it. Overall, the Virginia system of higher education ranks 12th in the nation in total FTE student enrollment.

In the South, only the state systems in Texas, Florida, and North Carolina enroll more students than Virginia's public institutions. Nationally, only California, Texas, New York, Illinois, Michigan, Ohio, Florida, Pennsylvania, North Carolina, and Wisconsin enroll more students in their state systems.

About 86 percent of all the students enrolled in higher education in Virginia are in the public institutions. Nationally, approximately 75 percent of the students in each state attend that state's public institutions.

The state has a relatively large percentage of its total population enrolled in public higher education. Measured on this basis, Virginia ranked 20th in the nation, with 3.00 percent of its total population enrolled in the two and four-year public institutions. This ranking placed Virginia well above the national average of 2.75 percent. When the independent institutions are included in this measurement, Virginia ranked 24th in the nation (at 3.63 percent), ahead of all other Southern states except North Carolina (at 3.86 percent).

The Commonwealth's residents rank 11th in the nation in personal disposable income, based on 1985 data. In that year, Virginia's disposable income was estimated to be more than \$70 billion. The state's potential tax capacity per capita in 1985 was \$1,352, as determined by a national "representative tax system" model applied identically to all 50 states. This amount ranked Virginia 26th in the nation, up from 29th in 1983.

Virginia has the highest per capita income

in the South (\$15,408), the fourth fastest-growing per capita income in the nation. Nationally, only ten states have higher per capita income; Virginia is \$767 above the national average.

Despite its increasing wealth, Virginia's tax rates remain relatively low. In 1985, the state collected \$1,193 per capita, giving it a national ranking of 35th, a decline from 32nd in 1983. Of all tax revenues collected in 1986-87, 9.9 percent of the total went to higher education, an increase from 9.6 percent in 1984-85. This increase ranked Virginia 13th nationally. By contrast, however, the neighboring state of North Carolina devoted 13.1 percent of its tax revenues to higher education in 1986-87.

In 1986-87, a full-time-equivalent student attending a public institution in Virginia paid average net tuition (a weighted average for two and four-year institutions) of \$1,483, the fifteenth-highest amount for public institutions in the nation and the highest in the South. The state's average appropriation from tax revenues for each full-time-equivalent student was \$3,672, 23rd highest nationally and a move up from 37th in 1984-85. The total funds expended per student (the appropriation plus tuition), at \$5,155, ranked Virginia 23rd in the nation, slightly behind Wisconsin (\$5,167) and California (\$5,164). Because of its low tuition charges, North Carolina ranked 38th (\$4,455) in total funds expended per student.

All of these data indicate that Virginia is a growing, prosperous state in which great progress has been made in funding higher education. When the state's combined tax effort, state allocation, and tuition charges to finance higher education are compared with other states, Virginia moved from 20th in 1984-85 to 17th in

1986-87 in funding effort for higher education. Further evidence of the state's effort is that only three states (Florida, Maine, and Massachusetts) had a higher percentage increase in state tax funds appropriated for higher education over the last eleven years (1977 to 1987) than Virginia. State general fund appropriations for Virginia higher education increased 177 percent during this time. Overall, Virginia is 11th among all 50 states in total state appropriations for higher education. The Commonwealth is 4th among the Southern states.

HIGHER EDUCATION IN VIRGINIA

■ Enrollment

The 79 institutions included in the Virginia Plan enrolled approximately 320,000 students in Fall 1987. This is an increase of slightly more than 4 percent over Fall 1986.

The 1960s and early 1970s were years of unprecedented growth for public higher education in Virginia as well as nationally. Between 1965 and 1975, enrollment in the state-supported institutions more than tripled, from about 60,000 to almost 200,000 students. The growth was the result of the post-war "baby boom" and a determined effort on the part of the Commonwealth to make higher education accessible to all students who could benefit from it. The middle of the 1960s saw the development of the Virginia Community College System, which now enrolls approximately 44 percent of all the students who attend Virginia's public institutions.

Since 1975, enrollment growth has been much slower. But unlike the situation in some states that have had enrollment declines, the enrollment trend in Virginia has been consistently upward. This has been true even though

TABLE 1
Enrollment at Virginia's State-Supported Institutions, Fall 1987
 (On- and Off-Campus Students)

INSTITUTION	FULL-TIME	PART-TIME	VIRGINIA RESIDENTS	NON-VIRGINIA RESIDENTS	MEN	WOMEN	TOTAL
Christopher Newport College	2,052	2,359	4,014	397	1,749	2,662	4,411
Clinch Valley College	867	596	1,399	64	604	859	1,463
George Mason University	9,433	8,679	15,614	2,498	8,258	9,854	18,112
James Madison University	8,989	1,530	8,162	2,357	4,540	5,979	10,519
Longwood College	2,747	379	2,900	226	1,001	2,125	3,126
Mary Washington College	2,632	720	2,797	555	953	2,399	3,352
Norfolk State University	6,075	1,646	5,540	2,181	3,101	4,620	7,721
Old Dominion University	9,999	5,641	12,415	3,225	7,667	7,973	15,640
Radford University	7,101	1,021	7,272	850	2,973	5,149	8,122
University of Virginia	16,092	5,176	13,937	7,331	9,966	11,302	21,268
Virginia Commonwealth University	12,284	8,201	18,528	1,957	8,322	12,163	20,485
Virginia Military Institute	1,310	0	676	634	1,310	0	1,310
Virginia Polytechnic Institute	21,392	3,585	17,775	7,202	14,862	10,115	24,977
Virginia State University	2,938	953	2,446	1,445	1,602	2,289	3,891
William and Mary	6,239	953	4,754	2,438	3,456	3,736	7,192
TOTAL—FOUR-YEAR INSTITUTIONS	110,150	41,439	118,229	33,360	70,365	81,224	151,589
Blue Ridge Community College	633	1,816	2,416	33	930	1,519	2,449
Central Virginia Community College	867	2,786	3,609	44	1,604	2,049	3,653
Dabney S. Lancaster Community College	484	978	1,431	31	520	942	1,462
Danville Community College	827	1,439	2,210	56	987	1,279	2,266
Eastern Shore Community College	158	284	439	3	133	309	442
Germanna Community College	502	1,723	2,192	33	713	1,512	2,225
J. Sargeant Reynolds Community College	1,996	8,620	10,461	155	3,991	6,625	10,616
John Tyler Community College	792	4,204	4,566	430	2,137	2,859	4,996
Lord Fairfax Community College	475	1,780	2,175	80	848	1,407	2,255
Mountain Empire Community College	1,039	1,470	2,491	18	1,157	1,352	2,509
New River Community College	1,193	2,226	3,345	74	1,496	1,923	3,419
Northern Virginia Community College	7,808	27,076	31,905	2,979	15,191	19,693	34,884
Patrick Henry Community College	524	1,292	1,809	7	669	1,147	1,816
Paul D. Camp Community College	268	857	1,125	0	322	803	1,125
Piedmont Virginia Community College	802	3,489	4,189	102	1,557	2,734	4,291
Rappahannock Community College	336	1,542	1,857	21	531	1,347	1,878
Southside Virginia Community College	743	1,576	2,315	4	773	1,546	2,319
Southwest Virginia Community College	1,529	3,721	4,986	264	3,084	2,166	5,250
Thomas Nelson Community College	1,610	5,346	6,536	420	2,975	3,981	6,956
Tidewater Community College	4,168	12,650	15,325	1,493	7,154	9,664	16,818
Virginia Highlands Community College	877	1,130	1,918	89	719	1,288	2,007
Virginia Western Community College	1,553	6,037	7,480	110	3,310	4,280	7,590
Wytheville Community College	703	1,157	1,825	35	671	1,189	1,860
TOTAL—COMMUNITY COLLEGES	29,887	93,199	116,605	6,481	51,472	71,614	123,086
Richard Bland College	570	338	889	19	335	573	908
TOTAL—TWO-YEAR INSTITUTIONS	30,457	93,537	117,494	6,500	51,807	72,187	123,994
TOTAL—ALL STATE INSTITUTIONS	140,607	134,976	235,723	39,860	122,172	153,411	275,583

the number of high school graduates in Virginia declined between 1977-78 and 1986-87, from 72,089 to 63,113.

Fortunately, Virginia is among the states that have had continuing increases in population throughout most of the 1980s, so any decline in the traditional college-age population has not resulted in a uniform decrease in Virginia's higher education enrollment. On the contrary, there have been important areas of enrollment growth throughout the Commonwealth.

As noted earlier, more than 275,000 students were enrolled in Virginia's 39 state-supported institutions this past fall. Although these institutions had a growth rate of only 3.7 percent, the actual number of additional students increased by about 10,000. The enrollment, by institution, and the characteristics of the students are shown in Table 1.

Independent college enrollments in Virginia also grew substantially during the 1960s and early 1970s. But their growth was much slower than that of the public institutions. The independent institutions' percentage of the total system enrollment dropped from approximately 33 percent in 1960 to about 13 percent in 1978.

TABLE 2 Independent College and University Enrollment 1960-1987	
1960	16,810 (Est.)
1970	28,030
1973	27,908
1978	31,618
1980	34,224
1982	36,400
1985	40,381
1987	44,435 (Est.)

Since that time, however, the percentage has edged back up to 13.9 in Fall 1987. The historical growth of the independent institutions and their current enrollments are shown in Tables 2 and 3. In Fall 1987, these institutions had a 6.3 percent increase over their Fall 1986 headcount. Altogether, the institutions have an estimated 44,435 students this year, about 2,500 more students than in 1986.

A precipitous decline in the traditional college-age population between 1990 and 1995 will mean that even in Virginia the early 1990s will be a period of little growth and possibly some decreases in enrollment at some institutions. The current and projected higher education on-campus enrollments in Virginia between 1986 and 1998 are shown in Table 4. It should be noted that at least one public institution, George Mason University, is expected to continue growing because of rapid development in northern Virginia.

These projections are based on the best demographic data available in late 1987 and make no attempt to reflect changes in enrollment patterns which might occur if funding for various federal and state financial aid programs changes significantly. The projections also do not show future off-campus enrollments for Virginia's institutions. Currently, about 20,000 students are enrolled in courses and programs offered away from institutions' principal campuses.

At best, the indicators of student preparation for college in Virginia are mixed. Standardized tests administered in the elementary-secondary grades show marked improvements in student scores. In fact, this past year, 112 of the state's 134 school divisions had a substantial majority of test scores above the national norm.

TABLE 3
Headcount Enrollment at
Private Institutions, Fall 1987
(On- and Off-Campus)

INSTITUTION	FULL	TOTAL
Averett College	684	963
Bluefield College	281	344
Bridgewater College	841	874
Christendom College	146	147
College of Health Sciences	96	203
CBN University	405	902
Eastern Mennonite	884	961
Eastern VA Medical	387	430
Emory and Henry College	722	751
Ferrum College	1,057	1,132
Hampden-Sydney	870	870
Hampton University	4,332	5,147
Hollins College	843	1,026
Institute of Textile Technology	31	31
Katharine Gibbs School	53	53
Liberty University	4,995	7,356
Lynchburg College	1,628	2,319
Mary Baldwin College	836	1,110
Marymount University	1,231	2,842
National Business	869	928
Notre Dame Pont Catech	54	92
Pres. School of Christian Education	95	113
Protestant Episcopal Seminary	171	230
Randolph-Macon	1,034	1,052
Randolph-Macon Woman's	654	699
Roanoke College	1,303	1,530
Saint Paul's College	706	730
Shenandoah College	537	914
Southern Seminary Junior College	238	246
Sweet Briar College	581	598
Union Theological Seminary	210	210
University of Richmond	3,218	4,737
Virginia College	15	113
Virginia Intermont	334	389
Virginia Seminary	—	—
Virginia Union	1,201	1,283
Virginia Wesleyan	968	1,203
Washington and Lee	1,898	1,907
TOTAL—PRIVATE INSTITUTIONS	34,408	44,435

TABLE 4
Headcount and Full-Time Equivalent (FTE) Enrollment: Actual, Estimated and Projected
(On-Campus Students, Regular Session Only)

INSTITUTIONS	1986 ACTUAL FALL HEADCOUNT	1986-87 ACTUAL FTE	1987 ACTUAL FALL HEADCOUNT	1987-88 ESTIMATED FTE	1991 PROJECTED FALL HEADCOUNT	1991-92 PROJECTED FTE	1998 PROJECTED FALL HEADCOUNT	1998-99 PROJECTED FTE
Christopher Newport College	4,030	2,435	4,317	2,420	4,029	2,420	4,029	2,420
Clinch Valley College	988	810	1,039	872	1,130	938	1,130	938
George Mason University	17,364	11,076	17,881	11,121	20,052	12,717	23,726	15,056
James Madison University	9,757	9,297	10,126	9,398	10,040	9,587	10,475	9,915
Longwood College	2,789	2,692	2,967	2,695	2,944	2,808	3,165	2,963
Mary Washington College	3,192	2,722	3,352	2,776	3,423	2,923	3,510	3,004
Norfolk State University	7,148	6,213	7,361	6,378	7,921	6,954	8,237	7,230
Old Dominion University	14,204	11,007	14,389	11,121	15,011	11,318	15,011	11,318
Radford University	6,945	6,401	7,872	6,677	7,556	7,001	7,673	7,087
University of Virginia	17,629	16,823	17,476	17,159	17,827	17,241	17,827	17,241
Virginia Commonwealth University	18,697	12,666	19,381	13,522	18,460	13,554	18,460	13,554
Virginia Military Institute	1,304	1,480	1,130	1,470	1,309	1,477	1,300	1,468
Virginia Polytechnic Institute	22,345	21,410	22,702	21,790	22,219	21,527	22,214	21,521
Virginia State University	3,223	2,994	3,437	2,792	3,114	2,844	3,114	2,844
William and Mary	7,008	6,633	7,051	6,714	7,263	6,794	7,344	6,886
TOTAL—FOUR-YEAR INSTITUTIONS	136,623	114,659	140,661	116,905	142,298	120,103	147,215	123,445
Blue Ridge Community College	1,718	794	1,690	790	1,800	790	1,800	790
Central Virginia Community College	3,328	1,380	3,232	1,435	3,416	1,435	3,416	1,435
Dabney S. Lancaster Community College	1,145	595	1,209	565	1,150	565	1,150	565
Danville Community College	1,798	1,061	2,038	1,116	1,799	1,116	1,799	1,116
Eastern Shore Community College	442	224	442	251	471	251	471	251
Germanna Community College	2,142	627	1,279	470	1,329	470	1,329	470
J. Sargeant Reynolds Community College	10,488	3,622	10,529	3,780	10,800	3,780	10,800	3,780
John Tyler Community College	3,181	1,307	3,399	1,420	3,276	1,420	3,276	1,420
Lord Fairfax Community College	1,798	740	1,911	751	1,814	751	1,814	751
Mountain Empire Community College	1,935	1,036	2,055	971	2,031	971	2,031	971
New River Community College	2,388	1,383	2,613	1,467	2,428	1,467	2,428	1,467
Northern Virginia Community College	32,667	13,632	33,929	13,986	33,641	13,986	33,641	13,986
Patrick Henry Community College	1,552	723	1,574	701	1,680	701	1,680	701
Paul D. Camp Community College	629	314	648	525	1,052	525	1,052	525
Piedmont Virginia Community College	3,103	1,199	3,319	1,220	3,159	1,220	3,159	1,220
Rappahannock Community College	1,036	481	1,151	481	1,049	481	1,049	481
Southside Virginia Community College	1,262	744	1,543	732	1,268	732	1,268	732
Southwest Virginia Community College	4,452	1,764	3,992	1,789	4,453	1,789	4,453	1,789
Thomas Nelson Community College	5,745	2,556	6,368	2,665	6,005	2,665	6,005	2,665
Tidewater Community College	15,106	6,749	16,291	6,950	15,466	6,950	15,466	6,950
Virginia Highlands Community College	1,594	979	1,871	987	1,612	987	1,612	987
Virginia Western Community College	6,280	2,386	7,470	2,502	6,500	2,502	6,500	2,502
Wytheville Community College	1,973	947	1,860	943	2,101	943	2,101	943
TOTAL—COMMUNITY COLLEGES	105,762	45,243	110,413	46,497	108,300	46,497	108,300	46,497
Richard Bland College	740	551	795	552	770	568	770	568
TOTAL—TWO-YEAR INSTITUTIONS	106,502	45,794	111,208	47,049	109,070	47,065	109,070	47,065
TOTAL—ALL STATE INSTITUTIONS	243,125	160,453	251,869	163,954	251,368	167,168	256,285	170,510



High school graduation requirements also have become more rigorous in the past few years. But while scores on the Scholastic Aptitude Test (SAT) taken by all students planning to enter senior institutions in Virginia climbed between 1981 and 1986, they dropped slightly in 1987 to 907, one point lower than in 1986. This still is one point higher than the national average.

■ Part-Time Students

As Virginia's enrollment has become less dependent on 18- to 21-year-olds during the last several years, the number of part-time, older students has increased significantly. Table 5 contrasts the change in the mix of full-time and part-time students attending the state-supported institutions between 1970 and 1987.

In 1970, only slightly more than 28,000 students were enrolled part-time (26 percent of the total enrollment). By Fall, 1987 almost 135,000 students (about 49 percent of the total enrollment) were part-time and over 75 percent of the

students who enrolled at two-year institutions did so part-time.

Although the percentage of part-time students in the senior colleges and universities declined between 1980 and 1985, the trend has shifted upward again. In the 1987-88 academic year, over 27 percent of these students are part-time. In fact, the part-time enrollment in the senior, public institutions has increased almost 5 percent since 1985.

The total part-time enrollment for all institutions also is on the rise. Forty-eight percent of the total enrollment in the Virginia public system was part-time in 1980. By 1982, the percentage had declined to 46; by 1985, it had fallen to 44.5 percent. However, by Fall 1987, 49 percent of the total enrollment in the public institutions was part-time, a new high for the system.

■ Age Shifts

The age shift in all institutions has had a significant effect on the character of the institutions. In 1987, as noted in Table 6, approximately 32 percent of Virginia's enrollment in the senior state-supported institutions was comprised of students beyond the age of 24. This is an increase of about seven percent since 1985. In the community colleges, well over half (about 59 percent) of all students were 25 or older. For the entire public system, about 44 percent were older than the traditional college age, an increase of approximately four percent in two years. As the "baby-boom" generation grows older, its members continue to return for additional college work.

■ Minority Students

Although Virginia has attempted to provide

TABLE 5
Full-Time and Part-Time Fall Headcount
Fall 1970 and Fall 1987 at State-Supported Institutions

FALL	TWO-YEAR INSTITUTIONS			SENIOR INSTITUTIONS			ALL INSTITUTIONS		
	FULL-TIME	PART-TIME	TOTAL	FULL-TIME	PART-TIME	TOTAL	FULL-TIME	PART-TIME	TOTAL
1970									
Number	16,076	12,223	28,299	62,924	16,161	79,085	79,000	28,384	107,384
Percent	56.81	43.19	100.00	79.57	20.43	100.00	73.57	26.43	100.00
1987									
Number	30,457	93,537	123,994	110,150	41,439	151,589	140,607	134,976	275,583
Percent	24.56	75.44	100.00	72.66	27.34	100.00	51.02	48.98	100.00
Percent Increase Since 1970	89.46	665.25	338.16	75.05	156.41	91.68	77.98	375.54	156.63

TABLE 6
Headcount Enrollment by Age
State-Supported Institutions, Fall 1987
(On- and Off-Campus)

TYPE OF INSTITUTION	UNDER 18	18-21	22-24	25-34	35-44	45-49	60 & OVER	UNKNOWN	TOTAL
Four-Year Institutions									
Number	1,198	75,355	26,354	29,142	13,455	4,737	690	658	151,589
Percent	0.79	49.71	17.39	19.22	8.88	3.12	0.46	0.43	100.00
Two-Year Institutions									
Number	2,093	33,224	15,567	38,051	22,750	10,840	1,469	0	123,994
Percent	1.69	26.79	12.55	30.69	18.35	8.74	1.18	0.00	100.00
TOTAL STATE-SUPPORTED									
NUMBER	3,291	108,579	41,921	67,193	36,205	15,577	2,159	658	275,583
PERCENT	1.19	39.40	15.21	24.38	13.14	5.65	0.78	0.24	100.00

TABLE 7
Estimated Minority Headcount Enrollment for 1973 and 1987 at State-Supported Institutions

TYPE OF INSTITUTION	1973			1987		
	MINORITY*	WHITE	TOTAL	MINORITY*	WHITE	TOTAL
Four-Year Institutions	14,007	82,046	96,053	29,457	122,132	151,589
Percent	14.6	85.4	100	19.4	80.6	100
Two-Year Institutions	6,726	46,589	53,315	22,066	101,928	123,994
Percent	12.6	87.4	100	17.8	82.2	100
TOTAL	20,733	128,635	149,368	51,523	224,060	275,583
PERCENT	13.9	86.1	100	18.7	81.3	100

*Includes Non-Resident Aliens

access to higher education for all citizens, during the last 15 years, the Commonwealth has placed special emphasis on enrolling additional numbers of minority students. As will be ob-

served in Table 7, minority enrollment in the state-supported institutions rose almost 150 percent between 1973 and 1987. At the same time, the minority percentage of the total student en-

rollment has increased from 13.9 percent in 1973 to 18.7 percent in 1987. The latter percentage is roughly equivalent to the minority percentage of the population in Virginia.

Nationally, the participation rate for minority students in higher education has declined over the past eight years. Virginia's participation rate is above the national average, due to the Commonwealth's strong commitment to increasing its minority enrollment and to the concerted efforts of all of the institutions. But the rate, compared to that for white students, lags what it should be. The college-going rate of black students graduating from high school has remained stable since 1978, at about 31 percent, while the rate for white students has increased from 40 to 51 percent. Virginia continues to seek new ways to achieve a significant increase in the number of minority students enrolling in its colleges and universities.

■ Appropriations

Table 8 shows the appropriations made to the state-supported institutions for operating expenses from the 1976-78 biennium through the 1986-88 biennium. Since 1974, higher education appropriations as a percentage of the total state budget have climbed from about 12 percent to 15.7 percent. Much of the increase can be attributed to a decision several years ago to require students and their parents to pay a greater share of the cost of education through tuition increases (non-general fund appropriations).

Despite its size and relative affluence, as late as 1983-84, Virginia ranked 27th in the nation in per capita spending for higher education, at \$111.21 per person. For every one thousand dollars of personal income, Virginia spent \$9.18 for higher education, placing it 34th in the

nation. Appropriations per capita increased to \$136.40 for the 1985-86 fiscal year (the latest data available), ranking Virginia 23rd in the nation, while appropriations per one thousand dollars of personal income increased to \$5.38, giving Virginia a ranking of 32nd nationally.

These data support the earlier observation that Virginia is improving its fiscal support for higher education but has yet to reach the national average on several of the fiscal indicators used to compare state funding efforts.

■ Educational Facilities

The amount of space at the state-supported institutions that is used for instruction, research, and public service nearly doubled between 1966 and 1976 as Virginia's Community College System was being built. Since that time,

TABLE 8
Biennial Appropriations for Operating Expenses at State-Supported Institutions

APPROPRIATIONS	1976-78	1978-80	1980-82	1982-84*	1984-86	1986-88	10 YEAR % INCREASE
TOTAL APPROPRIATIONS							
Total State Appropriations	7,353,625,640	9,196,899,108	11,735,178,265	13,343,277,485	15,982,017,906	19,372,366,723	163
% Increase Over Previous Biennium	21.0	25.1	27.6	13.7	19.8	21.2	
Higher Education Institutions**	970,266,775	1,238,530,480	1,636,203,370	2,023,529,710	2,427,036,004	3,042,777,246	214
% Increase Over Previous Balance	32.0	27.6	32.1	23.7	19.9	25.4	
Higher Education as % of Total	13.2	13.5	13.9	15.2	15.2	15.7	
GENERAL FUND APPROPRIATIONS							
Total State General Fund Appropriations	3,645,550,795	4,484,230,063	5,533,340,990	6,375,457,290	7,849,874,659	9,543,063,715	162
% Increase Over Previous Biennium	25.0	23.0	23.4	15.2	23.1	21.6	
% of Total Appropriation	49.6	48.8	47.2	47.8	49.1	49.3	
Higher Education Institutions**	523,846,120	692,251,125	855,233,300	985,494,720	1,186,117,630	1,450,595,135	177
% Increase Over Previous Biennium	25.0	32.1	23.5	15.2	20.4	22.3	
% of Higher Education Appropriation	54.0	55.9	52.3	48.7	48.9	47.7	
Higher Education as % of Total General Fund	14.4	15.4	15.5	15.5	15.1	15.2	
NONGENERAL FUND APPROPRIATIONS							
Total State Nongeneral Fund Appropriations	3,708,074,845	4,712,669,045	6,201,837,275	6,967,820,195	8,132,143,247	9,829,303,008	165
% Increase Over Previous Biennium	17.3	27.1	31.6	12.4	16.7	20.9	
% of Total Appropriations	50.4	51.2	52.8	52.2	50.9	50.7	
Higher Education Institutions**	446,420,655	546,299,355	780,970,070	1,038,034,990	1,240,918,374	1,592,182,111	257
% of Increase Over Previous Biennium	41.4	22.4	43.0	32.9	19.5	28.3	
% of Higher Education Appropriation	46.0	44.1	47.7	51.3	51.1	52.3	
Higher Education as % of Total Nongeneral Fund	12.0	11.6	12.6	14.9	15.3	16.2	

* Adjustments made to salaries, merit, and the retirement plan in the 1983 session are not reflected in the higher education institutional appropriations. The total state adjustment is made through central appropriations; however, institutions' specific amounts are not available.

** Excludes the medical school hospitals at the University of Virginia and Virginia Commonwealth University, the Extension Division and the Research Division at Virginia Polytechnic and State University, and the State Council of Higher Education and all supplemental programs; the Division of Continuing Education and Public Service Bureaus and the Virginia Associated Research Campus merged with the main agencies (the University of Virginia and the College of William and Mary, respectively) during the 1984-86 biennium. Prior to this, these agencies were excluded from the summary. The Virginia Community College System Office, the Virginia Institute of Marine Science, the Innovative Technology Authority (funding began in 1984-86), and the VCBA-HEETF (funding began in 1986-88) are included. CENTRAL APPROPRIATIONS ARE EXCLUDED.

TABLE 9 Net Additional Educational and General Space Needs by 1998-99 at State-Supported Institutions						
TYPE OF INSTITUTIONS	CLASSROOMS/ LABORATORIES	FACULTY OFFICE	LIBRARY	PHYSICAL EDUCATION	INSTRUC- TIONAL SUPPORT	TOTAL EDUCATIONAL AND GENERAL
All Institutions	(378,219)	58,506	1,101,776	370,675	1,293,979	2,446,717
Doctoral	110,550	11,743	793,606	231,472	1,107,797	2,255,168
Four-Year	(257,298)	(69,438)	209,034	(36,046)	115,544	(38,204)
Two-Year	(231,471)	116,201	99,136	175,249	70,638	229,753

Parentheses denote excess space (for instance, all four-year state-supported institutions have a net excess of 257,000 square feet of classroom/laboratory space.)

the Commonwealth has provided additional space through the passage of a bond referendum in 1978 and substantial biennial appropriations for capital outlay.

Table 9 projects the net additional educational and general space needs, by types of space, for all state-supported institutions through 1998-99. Additional space will be needed primarily for instructional support (administrative and research), libraries, and faculty offices. The doctoral institutions will require most of the total additional space for these activities.

TABLE 10 Number of Degrees* Conferred by Virginia's State-Supported Institutions			
TYPE	1975-76 DEGREES	1985-86 DEGREES	PERCENT INCREASE
Four-Year	21,765	25,435	17
Two-Year	5,526	6,179	12
Total	27,291	31,614	16

*Includes associate, baccalaureate, master's, first professional, and doctoral degrees.

Systemwide, the institutions' additional space needs are projected at about 2.5 million square feet by 1998-99. Although certain institutions (particularly some four-year colleges and universities) will have space excesses, the system as a whole projects a net additional need in all types of educational and general space except classrooms.

■ Curricula

The number of degrees awarded at Virginia's public institutions increased 16 percent between 1975-76 and 1985-86 (Table 10). During this time, the number of degrees conferred by the state-supported institutions, as a group, rose from 27,291 to 31,614. However, it is significant that the latter figure is about 250 fewer degrees than were conferred in 1983-84. Apparently the increase in the number of part-time students in the public institutions has resulted in the number of degrees awarded remaining relatively static. Presumably, more students than ever before are taking courses to improve their job skills, to prepare for transfer to other institutions, or simply to enrich their lives; many of

them do not intend to work toward degrees. Another possibility is that students are taking fewer classes per term, thereby extending the time necessary to complete their academic work. Both trends have been prevalent in the community colleges for a number of years but now have become even more pronounced; these institutions had a decline of about 550 in the number of associate degrees awarded annually between 1983-84 and 1985-86.

Table 11 is especially important because it shows, according to the number of degrees conferred in various disciplines, the academic emphases of the state-supported institutions in 1985-86 and, by inference, student academic interests as well. Of the 25,435 degrees awarded by the senior institutions, 5,125 (20 percent of the total) were in Business and Management.

The number of students receiving degrees in business reflects the rapid growth in this field in recent years and continues a trend begun in 1980-81 when, for the first time, the largest

TABLE 11 Total Degrees Conferred in Selected* Disciplines at Senior State-Supported Institutions, 1985-86	
DISCIPLINES	DEGREES
Business & Management	5,125
Education	2,853
Social Sciences	2,670
Health & Allied Health	1,479
Letters (English, Literature, Classics)	1,288

*Disciplines in which 1,000 degrees were awarded at the bachelor's, master's and doctoral level in a single year.



TABLE 12 Total Degrees* Conferred in Technological Disciplines at Senior State-Supported Institutions, 1985-86	
DISCIPLINES	DEGREES
Biological Sciences	996
Computer Science	1,144
Engineering Sciences	2,083
Mathematics	439
Physical Sciences	835

*Degrees awarded at the bachelor's, master's, and doctoral levels in a single year.

number of degrees were conferred in a field other than Education.

Of particular interest are the degrees-conferred trends among the technological disciplines. Table 12 shows the numbers in five areas. The largest numbers by far are in Engineering Sciences, but the greatest growth is in Computer Science, which increased by 304 degrees between 1983-84 and 1985-86. The number conferred in Biological Sciences has been relatively stable for several years and actually declined by 56 between 1983-84 and 1985-86. The number of degrees conferred in Mathematics and in the Physical Sciences increased (by 68 and 163, respectively) between the two years.

In 1985-86, Virginia's independent institutions conferred 7,038 degrees at all levels. The only doctoral degrees awarded by these institutions were in law (advanced degrees), life sciences, psychology, theology and medicine. Table

13 reflects the academic emphases of the independent institutions. Of the total degrees awarded, the largest number, 22 percent, again were in Business and Management.

■ Faculty

It is apparent from Table 14 that the number of faculty holding tenure in the senior state-supported institutions continues to increase. In 1975-76, 42.2 percent of the faculty in these institutions had tenure; by 1985-86, the percentage had risen to 62.6. But the tenure percentages vary greatly across the 15 senior institutions and they are, on the whole, within an acceptable range. It should be remembered that the State Board for Community Colleges several years ago eliminated the possibility of new faculty receiving tenure. Therefore, the percentage of tenured faculty in these institutions

TABLE 13
Total Degrees Conferred in
Selected* Disciplines at
Private Institutions, 1985-86

DISCIPLINES	DEGREES
Business & Management	1,597
Social Sciences	1,048
Education	638
Psychology	411
Biological Sciences	315
Theology	297
Law	264

*Disciplines in which at least 200 degrees were awarded at the bachelor's, master's, professional, or doctoral level in a single year.

TABLE 14
Faculty Tenure at Virginia State-Supported Institutions, 1986

INSTITUTIONS	NUMBER OF FACULTY	NUMBER TENURED	PERCENT TENURED
Christopher Newport College	109	75	68.8
Clinch Valley College	41	27	65.9
George Mason University	509	287	56.4
James Madison University	453	299	66.0
Longwood College	135	94	69.6
Mary Washington College	152	90	59.2
Norfolk State University	308	165	53.6
Old Dominion University	580	357	61.6
Radford University	330	195	59.1
University of Virginia	965	609	63.1
Virginia Commonwealth University	825	506	61.3
Virginia Military Institute	91	60	65.9
Virginia Polytechnic Institute	1,313	860	65.5
Virginia State University	196	96	49.0
William and Mary	374	276	73.8
TOTAL—FOUR-YEAR INSTITUTIONS	6,381	3,996	62.6
Blue Ridge Community College	43	7	16.3
Central Virginia Community College	62	13	21.0
Dabney S. Lancaster Community College	34	8	23.5
Danville Community College	60	17	28.3
Eastern Shore Community College	16	1	6.3
Germanna Community College	33	1	3.0
J. Sargeant Reynolds Community College	129	3	2.3
John Tyler Community College	65	20	30.8
Lord Fairfax Community College	32	0	0.0
Mountain Empire Community College	49	0	0.0
New River Community College	58	15	25.9
Northern Virginia Community College	467	52	11.1
Patrick Henry Community College	30	0	0.0
Paul D. Camp Community College	26	0	0.0
Piedmont Virginia Community College	55	0	0.0
Rappahannock Community College	22	0	0.0
Southside Virginia Community College	40	0	0.0
Southwest Virginia Community College	65	9	13.8
Thomas Nelson Community College	104	16	15.4
Tidewater Community College	245	7	2.9
Virginia Highlands Community College	54	6	11.1
Virginia Western Community College	103	35	34.0
Wytheville Community College	46	12	26.1
Richard Bland College	29	23	79.3
TOTAL—2-YEAR INSTITUTIONS*	1,867	245	13.1
TOTAL—PUBLIC INSTITUTIONS	8,248	4,241	51.4

*The VCCS replaced its tenure system (for new hires) in 1972 with a series of one, three, and five-year contracts.

TABLE 15
Faculty Tenure at Virginia Private Institutions, 1986

INSTITUTIONS	NUMBER OF FACULTY	NUMBER TENURED	PERCENT TENURED
Averett College	47	22	46.8
Bluefield College	—	—	—
Bridgewater College	49	37	75.5
CBN University	—	—	—
Christendom College	9	0	0.0
College of Health Sciences	—	—	—
Eastern Mennonite College	53	8	15.1
Eastern Virginia Medical College	—	—	—
Emory and Henry College	51	36	70.6
Ferrum College	72	44	61.1
Hampden-Sydney College	61	40	65.6
Hampton University	239	66	27.6
Hollins College	67	49	73.1
Institute of Textile Technology*	—	—	—
Katharine Gibbs School*	5	0	0.0
Liberty University	—	—	—
Lynchburg College	125	83	66.4
Mary Baldwin College	63	25	39.7
Marymount College	71	27	38.0
Presbyterian School of Christian Education	12	5	41.7
Protestant Episcopal Theological Seminary	16	11	68.8
Randolph-Macon College	70	7	10.0
Randolph-Macon Woman's College	71	47	66.2
Roanoke College	77	53	68.8
Saint Paul's College	44	23	52.3
Shenandoah College	71	18	25.4
Southern Seminary Junior College	16	0	0.0
Sweet Briar College	68	48	70.6
Union Theological Seminary	20	16	80.0
University of Richmond	204	138	67.6
Virginia College	—	—	—
Virginia Intermont College	37	9	24.3
Virginia Seminary	—	—	—
Virginia Union University	66	18	27.3
Virginia Wesleyan College	48	26	54.2
Washington and Lee University	148	115	77.7
TOTAL—PRIVATE INSTITUTIONS	1,880	971	51.6

*Institution does not have a tenure program.
SOURCE: 1986-87 AAUP Faculty Salary Survey

remains low.

The percentage of tenured faculty varies considerably among the independent institutions (Table 15). Among those institutions reporting, some had no tenured faculty while others were highly tenured.

Although the cost of faculty salaries has some relationship to the number of faculty holding tenure at an institution, the cost is more directly determined by the number of faculty at the upper ranks of professor and associate professor. Virginia's state-supported colleges and universities reflect the national situation, with faculty generally remaining employed at the same institutions for longer periods of time. As a result, the percentage of faculty at the upper-level ranks is increasing.

Table 16 reveals that in 1975-76, 17.7 percent of the faculty in the state-supported institutions held the rank of professor; in 1985-86, 32.1 percent of the total faculty were at this rank. The same pattern exists for the rank of associate professor. In 1975-76, 24.7 percent of the faculty were at this level, but by 1985-86 the percentage had risen to 32.2. Recent enactment of laws to allow Virginia's employees to retire at age 55 with 30 years of state service and to provide incentives for college faculty who choose early retirement may alter these percentages in future years.

■ Making Progress on Faculty Salaries

In 1984-85, Virginia ranked 4th among the Southern states in the average salary paid full-time faculty at the state-supported institutions. The average salary for all faculty ranks in that year was \$29,076. In each year of the 1984-86 biennium, the faculty salary increase at each

TABLE 16
Distribution of Faculty by Rank at Virginia's State-Supported Institutions, 1986

STATE-SUPPORTED INSTITUTIONS	NUMBER OF FACULTY	PERCENT PROFESSOR	PERCENT ASSOCIATE PROFESSOR	PERCENT ASSISTANT PROFESSOR	PERCENT INSTRUCTOR	PERCENT OTHER
George Mason University	509	24.6	39.3	33.4	2.8	0.0
Old Dominion University	580	27.4	36.6	22.8	9.7	3.6
University of Virginia	965	41.3	27.0	23.8	3.0	4.8
Virginia Commonwealth University	825	21.3	38.1	31.9	8.4	0.4
Virginia Tech	1,313	34.8	33.2	24.9	6.5	0.6
William and Mary	374	45.7	32.9	17.9	3.5	0.0
TOTAL—DOCTORAL	4,566	32.6	33.9	26.0	5.8	1.7
Christopher Newport College	109	27.5	33.9	32.1	6.4	0.0
Clinch Valley College	41	24.4	34.1	39.0	2.4	0.0
James Madison University	453	30.2	33.1	27.8	8.8	0.0
Longwood College	135	23.0	37.0	25.2	14.8	0.0
Mary Washington College	152	33.6	24.3	33.6	8.6	0.0
Norfolk State University	308	30.8	24.4	28.6	15.6	0.6
Radford University	330	33.0	27.3	30.6	8.8	0.3
Virginia Military Institute	91	50.5	22.0	24.2	1.1	2.2
Virginia State University	196	28.1	19.4	41.8	10.7	0.0
TOTAL—COMPREHENSIVE	1,815	31.1	28.2	30.6	9.9	0.3
TOTAL—FOUR-YEAR INSTITUTIONS	6,381	32.1	32.2	27.3	7.0	1.3
VA. COMMUNITY COLLEGE SYSTEM	1,838	17.5	31.1	36.0	15.2	0.2
Richard Bland College	29	17.2	62.1	17.2	3.4	0.0
TOTAL—TWO-YEAR INSTITUTIONS	1,867	17.5	31.6	35.7	15.1	0.2
TOTAL—ALL STATE-SUPPORTED INSTITUTIONS	8,248	28.8	32.1	29.2	8.8	1.1

SOURCE: 1986-87 AAUP Faculty Salary Survey

public institution averaged 10 percent. The trend continued during 1986-88. In fact, by 1986-87, Virginia ranked first among all Southern states in the average salary for full-time faculty at all ranks (professor, associate professor, assistant professor, and instructor) combined. This percentage growth, which exceeds the na-

tional average, has helped Virginia considerably in attracting and retaining outstanding faculty from throughout the nation.

At the direction of the General Assembly, the Council of Higher Education has developed a system for setting faculty salary averages that is based upon each Virginia college and univer-

sity having a list of similar institutions to which its average salary is compared. The Council will continue to refine this system, which has received strong support within state government and from the institutions.

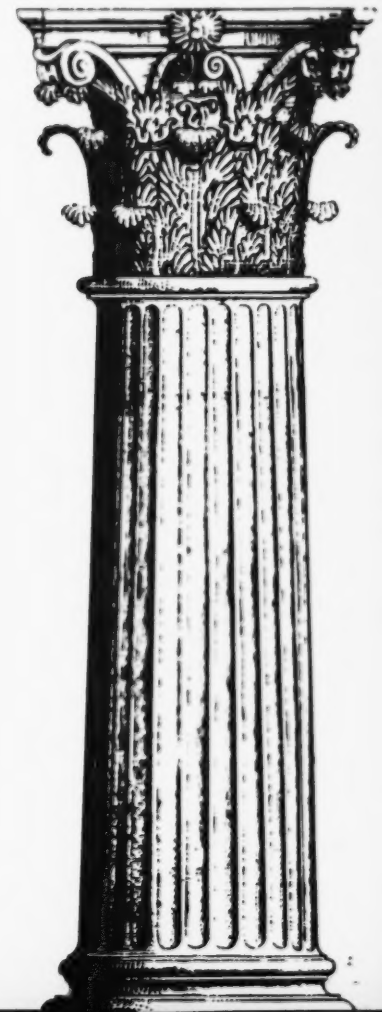
SUMMARY

This chapter has presented a great deal of data about the Virginia system of higher education. Generally, the data support the Council of Higher Education's judgment that Virginia's system of higher education basically is sound and vigorous and that its excellence is increasing.

Clearly, much remains to be accomplished. Individually, several institutions are recognized nationally for their preeminence. Virginia must ensure that these institutions are able to build upon their past achievements to reach new levels of excellence. New programs, such as the Commonwealth Centers, described elsewhere in this plan, will help to ensure that this happens. At the same time, the state must support the continued development of the other institutions so that Virginia has not only a "good" system but "one of the best in the nation." The issue papers which follow suggest a number of ways to sustain past accomplishments and to increase the progress toward this goal.

The Issues

The overall condition of Virginia higher education is strong. The institutions generally have become more efficient and have found new ways to respond to demands placed upon them. While the number of high school graduates has declined in the past several years, and will begin to decline once again around 1990, college and university enrollments remain generally stable. Student characteristics are changing, however, and Virginia's population is growing more rapidly in some portions of the state than in others. As a result, some colleges and universities are experiencing increasing enrollment, while others are experiencing declines. But in the aggregate, Virginia's system of higher education is a growing and changing system in a growing and changing state. The issue papers which follow discuss some of the current interests and concerns in Virginia higher education, and offer a blueprint of the future.



Building Upon Progress: Goals for Virginia Higher Education, 1988-90

Two years ago, in the last revision of the **Virginia Plan for Higher Education**, the Council of Higher Education asked a new question and set an additional goal for Virginia higher education. The question was this: "What must be done to move Virginia colleges and universities from their position of relative strength, particularly in undergraduate education but also in some research areas, to the very forefront of American higher education?"

The additional goal was simply stated: "Virginia will build a system of colleges and universities that is among the best in the nation."

Easier said than done, especially at a time when the federal government is retreating rapidly from its support of numerous social programs and the nation's economy is showing signs of coming unglued. Even though Virginia's financial situation is strong, money is limited and the demands for direct service to human beings are great. This may appear to be a good time to march in place for a while, and to see how things turn out.

But higher education should not and can not march in place at a time like this. Virginia's colleges and universities are called to make important contributions to the quality of life and prosperity of this state and the nation. There is simply no substitute for a well-educated citizenry, especially in periods of uncertainty.

Besides, even if we are sobered by the enormous social and economic problems facing the nation, Virginia itself is healthy and its system of higher education is rapidly gaining national recognition. Consider these points:

- Faculty salaries have increased by more than 40 percent in the past four years, far more than the cost of living.



- The Higher Education Equipment Trust Fund has had a revolutionary effect upon inventories of instructional and research equipment. Using a highly innovative funding technique, Virginia is meeting successfully one of the most serious problems in higher education.

- Enrollments continue to be strong across the spectrum of public and private institutions. Despite rhetoric about declines, an increased college-going rate compensated for drops in the

number of high-school graduates from 1980 to 1985. The number of high school graduates will increase for the next two years, and the proportion of high school students preparing for college appears to be increasing dramatically. Enrollment can be expected to increase at some institutions and to remain generally strong at least through 1990.

- Several colleges and universities have been identified as having nationally prominent pro-

grams. The University of Virginia, The College of William and Mary, Washington and Lee University, James Madison University, George Mason University, The University of Richmond, Hampden-Sydney College, Mary Baldwin College, Virginia Military Institute and Roanoke College are recognized for their undergraduate programs. The University of Virginia's schools of law and business are among the best in the nation, as is Virginia Polytechnic Institute and State University's college of engineering.

■ Unfortunately, the national lists of recognized colleges and universities reflect prestige within various groups of institutions. The contributions of many fine institutions are not recognized in such lists. Community colleges and some urban institutions, for instance, give untold numbers of persons opportunities to become economically productive and self-sufficient. In a sense, they save lives. But there are no national lists of institutions that save lives.

■ Preeminence in research is measured in two different ways. One of Virginia's universities has moved into the top 50 research universities in the nation when all sources of research and development expenditures (federal, state, and private) are counted. Virginia Tech is 44th, while the University of Virginia is 61st and Virginia Commonwealth University is 91st. When research and development funds from only the federal government are considered, Virginia has one university that ranks 52nd in the nation (the University of Virginia), and two other universities that are in the top 100 (Virginia Commonwealth University at 74th and Virginia Tech at 77th).

■ By electing to have each state-supported college and university develop procedures to assess

student learning, thereby emphasizing the importance of assessment in curriculum reform and faculty development, Virginia higher education's position has become a nationally recognized alternative to mandated, uniform statewide testing as a means of student assessment.

■ Virginia's special programs to emphasize institutional initiative and experimentation continue to attract national attention. Among these programs are Eminent Scholars, a state match of earnings on designated endowment to attract and retain distinguished faculty; the Outstanding Faculty Awards program, which honors those who teach and conduct research and scholarship in our institutions; Funds for Excellence, a competitive grant program to support innovations in curricula; and Commonwealth Centers.

The Commonwealth Centers deserve special mention. After review of more than 50 preliminary proposals, the Council of Higher Education requested 14 full proposals to establish Commonwealth Centers in disciplines in which a Virginia college or university is nationally eminent. The 14 proposals were reviewed by leading scholars across the nation, with one criterion placed before all others: the proposed activity had to be judged one of the three or four best of its kind in the nation. On this basis, the Council recommended that seven Commonwealth Centers be created in 1988-90. Financial support will come from the General Fund, the Higher Education Equipment Trust Fund, and sponsored research and scholarship.

■ Virginia's colleges and universities are proving to be a valuable asset in economic development. Commenting on the decision of Mobil Oil to move its corporate headquarters to Virginia, one analyst said, "Virginia has advantages. The

Virginia university system is terrific. For middle and lower management . . . that's a real benefit. Connecticut and New Jersey, even New York, just can't compete with the state universities of Virginia."

While great progress has been made in the last several years, numerous opportunities for improvement remain. Two years ago, in the 1985 revision of the Virginia Plan, the Council of Higher Education recommended ten actions that would help to move Virginia "to the very forefront of American higher education." The Council now presents a revised list to continue progress toward that goal.

1. CONTINUE EFFORTS TO FUND FULLY THE COMMONWEALTH'S HIGHER EDUCATION BUDGET GUIDELINES.

In 1985, the Council recommended providing the system of higher education with an aggregate 95 percent of positions justified by the guidelines and using the remaining five percent of justified positions for special initiatives identified by the Governor, the General Assembly and the Council. Continued enrollment growth, revenue limitations, and commitments to restrain increases in government employment have made this a difficult objective. Nonetheless, the Council recommends that it be reached.

Institutions in the aggregate had about 93 percent of the guideline positions justified by 1986-87 enrollments. But enrollments increase each biennium and several institutions are constantly making progress toward 93 percent, only to slip back because more students enroll.

In the long run, there are two important policy issues about staffing. The first is whether Virginia government should increase its number of employees in order to provide direct services

to more and more people who want or require them. On the one hand, state government's reluctance to get bigger is a welcome contrast to the swollen public payroll of the federal government. On the other, the students, patients, inmates, dependent children, and others who need or require state services are increasing in number. The budget for 1988-90 provides over 800 new positions in higher education, a welcome recognition of enrollment growth over the past several years.

The second issue is whether Virginia will increase its support of institutions for reasons of quality rather than growth. Several initiatives funded in the 1988-90 budget move in this direction but more remains to be done. Assessment of student learning is very important in these efforts, because institutions requesting support for quality should be able to demonstrate it systematically.

2. CONTINUE AND EXPAND THE PRACTICE OF PROVIDING SUPPORT TO COLLEGES AND UNIVERSITIES THAT RESPOND TO REQUESTS FOR PROPOSALS TO ADDRESS SPECIFIC STATE PRIORITY ISSUES.

This practice was introduced by Governor Gerald L. Baliles in preparing for the 1988-90 biennium. Institutional responses were good on the whole, and some were very good. If specific issues continue to be identified and funds provided to institutions whose proposed initiatives are imaginative and sensible, the responses will become even better. The budget process will be better able to support quality improvements in the institutions, and they will become more useful to Virginia as a result.

The establishment of Commonwealth Centers should be continued as part of this special

portion of the higher education budget. In 1988-90, the Council has recommended funding seven centers. Other university activities are developing quickly and probably soon will take their places among the best of their kind in the nation.

The Council strongly urges that one criterion continue to be applied to every potential Commonwealth Center: It must be among the three or four best activities in the nation in its discipline or disciplines. If it is not, it should not be designated a Commonwealth Center. Neither "very good" nor "locally eminent" is enough. The Centers are the pinnacles of acknowledged excellence in Virginia research and scholarship.

3. AFFIRM A REALISTIC AND CONSISTENT ENROLLMENT POLICY FOR HIGHER EDUCATION.

Despite their critics, the enrollment projections are neither wildly inaccurate nor problematic in themselves. But Virginia needs a good enrollment policy that is understood and supported by everyone involved with higher education.

Virginia has several of the most selective public colleges and universities in the nation. But if there are highly selective institutions, there must be others in which students who are not accepted at them or who choose to attend elsewhere can enroll. Some of these will be private, others will be public. Together, they form a complex hierarchy of selectivity and diversity of curricula that assures virtually anyone who wants and can benefit from higher education access to some college or university.

A reaction against broad, general access to higher education is brewing in this country, resulting from rising costs, limited revenues, and disillusion with the graduates of colleges and

universities. Even as students from minority groups, particularly Black and Hispanic, lose ground as a percentage of total enrollment, critics of open access are beginning to argue for a more elite conception of higher education.

Virginia should reject this argument, insisting that its system can and should offer a place to everyone who wants and can benefit from higher education. But a commitment to open access implies support of enrollment growth at selected institutions.

It should not imply that the lid is taken off the enrollments of every senior college and university. But if we want the people of Virginia to go to college, we have to provide places for them. Our current responses to increased enrollment are inconsistent. On the one hand, we support increased access to higher education. On the other, we view enrollment growth with suspicion, often penalize it, and do not provide resources for it. Some colleges and universities function as safety valves to relieve pressure on the system as a whole. We need and resent them at the same time.

The proper middle ground is hard to define. The state should not support growth undertaken for the sake of increased funding or unbridled competition for students. Neither can it afford to deliver higher education to the doorstep of every citizen. Indeed, a person's willingness to extend effort to acquire further education is a reasonable expectation on the part of the state. The Council of Higher Education will undertake to clarify enrollment policy for Virginia higher education in the coming year.

4. ADVANCE THE AVERAGE FACULTY SALARIES OF VIRGINIA'S COLLEGES AND UNIVERSITIES INTO THE TOP ONE-FOURTH OF EACH INSTITUTION'S

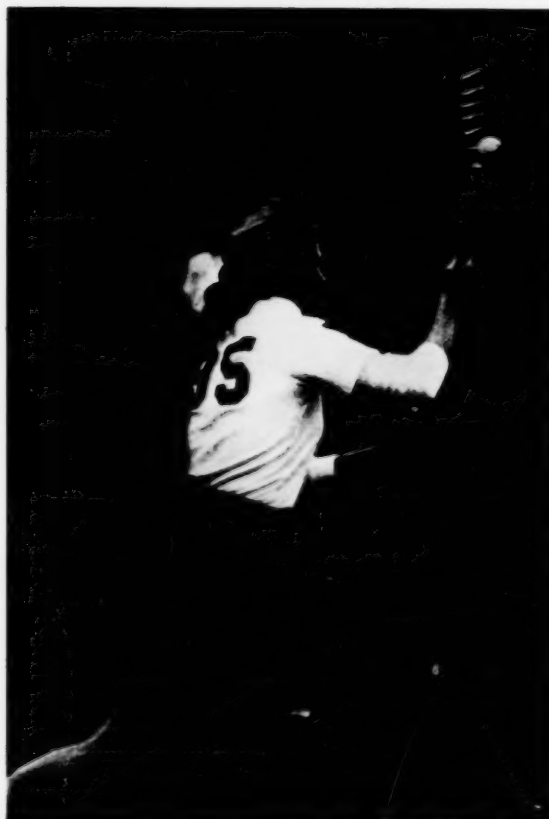
BENCHMARK GROUP BY 1992.

Virginia cannot aspire to preeminence in higher education without paying faculty salaries that are above average. Governors and the General Assembly have made extraordinary efforts in the past four years to increase average faculty salaries: there has been more than a 40 percent compounded increase. We recommended that the 1988-90 budget include increases that sustain this strong commitment, so that by 1990 the average faculty salaries of the institutions will place them in the top 40 percent of their benchmark groups. This recommendation has been accepted. We are on schedule, and should continue to progress toward a new objective by 1992.

5. REQUIRE CONTINUED PROGRESS IN ASSESSING STUDENT LEARNING AS A CONDITION FOR SPECIAL INITIATIVE FUNDING OF COLLEGES AND UNIVERSITIES.

Virginia has become the leading example of a statewide approach to student assessment that permits each institution to design an assessment program compatible with its own mission. The success of this approach, with its preservation of institutional autonomy and diversity, depends upon the integrity of each institution's efforts.

Assessment of learning is a matter of public accountability. But more important, it is part of a systematic, comprehensive conception of continuous faculty development and curriculum change. It also is essential to efforts to provide more funding based on quality. Institutions should be able to demonstrate how well they are doing, not just assert it. In 1988-90, the Council of Higher Education will use the Funds for Excellence, its competitive grant program, to support faculty-development projects that grow out



of assessment of student learning.

6. INCREASE THE VOLUME OF SPONSORED RESEARCH AT VIRGINIA'S MAJOR RESEARCH UNIVERSITIES.

In its 1985 revision to the Virginia Plan, the Council called for the creation of an incentive program in which the state matched some portion of institutions' increases in sponsored research volume. That recommendation was not

included in the budget but remains one of the Council's objectives.

The relative national standing of the state's three major research universities—Virginia Polytechnic Institute and State University, the University of Virginia, and Virginia Commonwealth University—should be improved. All should be among the top 50 research universities in the nation and at least one should be in the top 25. The efforts of other universities with growing research programs should be encouraged as well.

7. CREATE INSTITUTIONAL INCENTIVES FOR BETTER PLANNING AND INCREASED EFFICIENCY.

Since 1985, persons from executive agencies and the colleges and universities—guided by a steering group of cabinet officers, institutional presidents, and the director of the Council of Higher Education—have worked on plans by which decentralization of management authority could accomplish this objective. Institutional representatives have sought more control over their day-to-day operations and substantial revisions to the way institutional faculty, administrators and staff are treated in the state personnel system. State government has sought to establish performance criteria by which institutional eligibility for decentralized management authority could be determined.

Progress has been slow but consequential. These efforts should continue, primarily in the interests of increased efficiency in higher education and improved management performance by the colleges and universities.

8. AFFIRM VIRGINIA'S COMMITMENT TO THE EMINENT SCHOLARS PROGRAM.

The Commonwealth established the first

such program in the United States, and it has since been widely copied. During the past decade, the Council has only occasionally been able to match income from institutional endowments dedicated to this program on a dollar-for-dollar basis with state funds. A sizable increase in state funds to match income from endowments dedicated to this program is in the 1988-90 budget. This will increase the institutions' potential success in raising private funds to attract and retain eminent faculty. It also is another signal of Virginia's commitment to excellence in higher education.

While the Council vigorously supports the Eminent Scholars program as a major force for quality improvement in higher education, it believes the program itself could be strengthened. Working with the institutions, the Council is developing guidelines for the Eminent Scholars program that will help to guarantee its operational and academic integrity.

9. INCREASE THE NUMBER OF BLACK STUDENTS AND BLACK AND WOMEN FACULTY IN VIRGINIA HIGHER EDUCATION.

This is not simply an ancillary social objective of higher education. It is central to maintaining an intellectual environment in which a full spectrum of human experience is studied and brought to bear in scholarly inquiry. It is a curricular objective and it must be ranked among the primary objectives of Virginia higher education as it progresses toward its goal of standing among the best in the nation.

Related to minority participation, Virginia higher education should include more study of women's experience in the curriculum and more women among its faculty and administrators. Although women comprise more than half the

students in Virginia higher education, they are underrepresented on the faculties and especially in senior administrative positions. Neither are their distinctive experiences adequately represented in the curriculum. Real curriculum reform will succeed only when the composition of student bodies and faculties reflects the diversity of modern American society to the greatest possible extent.

Virginia's statewide efforts to provide equal educational opportunity for black citizens should continue basically the approach they have taken since 1983. They should remain highly flexible and pragmatic. What works should be pursued, what doesn't should be abandoned in favor of new activities.

10. DEVELOP NEW WAYS TO HELP SUPPORT VIRGINIA'S INDEPENDENT COLLEGES AND UNIVERSITIES AND REVISE THE TUITION ASSISTANCE GRANT PROGRAM.

A two-year Council study of independent college and university equipment and facilities renovation indicated substantial need. Under present tax law the best way to help institutions meet these needs is for the Virginia College Building Authority to permit greater flexibility in financing under its policies and procedures. But the high quality of VCBA bond issues must not be jeopardized in the process, because strong bond ratings make many of the VCBA financing packages feasible for participating colleges and universities.

Since 1974, the Council of Higher Education has had authority to contract with independent colleges and universities for services to Virginia. The Council should seek funds to test contracting with them for preparation of college graduates to enter specified fields of public service.

Public-school teaching would be a good place to start.

The Tuition Assistance Grant Program stipend for Virginia students attending independent colleges and universities is \$1250 in 1987-88. It will increase in 1988-90; the Council recommended \$1500. During the coming year, the Council proposes to work with the independent colleges and universities to redesign the program so it includes a base grant made regardless of financial need and a supplement based upon need. This objective is consistent with the Council's recommendation, in its 1987 study of student financial aid, that as much aid as possible be awarded on the basis of student need.

11. ESTABLISH COST CONTAINMENT PROCEDURES THAT WILL HELP TO CONTROL PRICE INCREASES TO STUDENTS.

In the judgment of the Council of Higher Education, the price of Virginia higher education is not now too high. But it is important to recognize that state public policy influences three related factors that determine who can go to college and where. First, some policies affect the cost of providing higher education. Examples are the commitment to increase faculty salaries and the creation of the Higher Education Equipment Trust Fund. The one increases cost immediately, while the other spreads the cost of immediate benefits over a longer time.

Second, some policies affect the price of higher education to students and their families. Examples are the practice of indexing tuition to general-fund appropriations, requiring that certain activities be self-supporting and permitting institutions to set their own prices for them, and determining who will be eligible for in-state tuition rates.

Third, some policies affect what students and their families actually have to pay for higher education and how they will pay it. These are financial-aid policies establishing programs of grants, work-study, loans, and savings for eligible students.

The actual price paid by students and their parents is a product of these policies, institutional practices, and marketplace factors over which higher education and the state have little

or no control (for instance, the cost of fuel, power and insurance). The Council will continue to recommend ways in which state policies and institutional practices can be changed and coordinated to keep the price of higher education within reach of Virginia's citizens.

But there is no such thing as a free lunch or a free education. If Virginia wishes to remain a relatively low tax state and at the same time aspires to place its colleges and universities in the

very forefront of American higher education, someone will have to pay what it costs. The price of higher education is really a user tax for a state service. One of the most complex state policy questions is how much of the actual cost of higher education should be born by users and how much by the state's general revenues. The present balance in Virginia seems reasonable to the Council of Higher Education, but the question requires continual attention.



Virginia's Academic Libraries in the Age of Information Technology

INTRODUCTION

The principal locus of the academy in western civilization has been the university, the community of scholars absorbed in the learning, teaching, and creation of a steadily increasing body of knowledge that encompasses all aspects of human experience. Within the university, no single component is more necessary and vital than the academic library. It preserves the records and artifacts of five millennia of human development and houses both the raw materials and the products of the academic endeavor. The library is vital to the academy, because without access to that repository of the past, the intellect is bound by the fallible limits of personal memory and experience.

In supporting the academy, the library must undertake three important functions. First, it must collect, preserve, and provide access to the written—and, increasingly, aural and visual—records of the past, the cumulative corpus of durable knowledge. This the academic library does rather well. Second, it must support teaching and research by acquiring or providing access to current sources of information. Pressed by the demand to serve the ever-changing intellectual interests and disciplinary foci of the academic library's clientele, and buffeted by inflation in both the publication and cost of information media, the ability of the library to fulfill this second function is slowly diminishing. Third, the academic library must nurture an intellectual environment which enables the academy to face the future, confident that the cumulative abstract and eclectic wisdom of humankind is readily accessible to successive generations of scholars. It is questionable whether this third function is now more than an abstract goal. Yet

it is central to what the academy is about.

In seeking to fulfill their tripartite mission, Virginia's academic libraries face the challenges of acquiring and providing access to an ever-increasing body of knowledge that must be housed



and serviced in facilities which are limited by design, size, and age. Moreover, these challenges must be met at a time when new technologies have created new information resources and services that complement—and compete with—those formerly provided by the academic library.

The continual demand for additional space to house academic library collections and services and the potential applications of electronic storage and retrieval of information as a means of reducing the need for library space were first investigated by the Council of Higher Education in 1986. The Council's report to the Virginia General Assembly, **Academic Library Facility Needs in Virginia's Public System of Higher Education** (House Document No. 14, 1987 General Assembly), included a commitment to assess and respond to the changes occurring in the academic library due to emerging information technologies. This paper is the first result of that continuing commitment.

THE EVOLUTION OF VIRGINIA'S ACADEMIC LIBRARIES DURING THE PAST TWO DECADES

The size and scope of services of Virginia's academic libraries have grown significantly during the past two decades. The continuous expansion of the academy's intellectual resources has been driven by three powerful forces: the evolving environment of the institutions of higher education, the constant expansion of the corpus of knowledge, and the concomitant demand for immediate access by the information consumer.

The growth of Virginia's system of higher education has affected the Commonwealth's academic libraries in many ways. Not only have new institutions created new library facilities and collections, but the size, scope, and focus of the collections and services provided by the libraries have been changed and influenced by the greatly expanded enrollments and program offerings. Moreover, the growth of graduate-level instruction and research has placed additional service demands upon the libraries.

Driven by the service requirements of burgeoning enrollments and expanded program offerings, the book collections of Virginia's public and private academic libraries have more than doubled in less than two decades and now comprise more than 15 million volumes. Subscriptions to periodicals, a primary source of current information and research, have increased from 47,400 in 1969 to over 128,000 in 1987. Moreover, the breadth of the collections has been enriched by the addition of the specialized materials needed to support both new doctoral programs and the growing research efforts of the faculty.

The holdings of the academic libraries also have expanded to include much more than printed materials in bound format. Microfilm collections not only preserve fragile manuscript and other archival artifacts but also make available scarce or out-of-print backruns of periodicals, newspapers, and other serial publications. With the acceptance of the "learning resource center" concept, which emphasizes the importance and usefulness of non-print information, and with the increasing use in teaching and research of aural and visual resources, the academic library now generally houses an integrated multi-media collection of information sources.

The growth of the academic library collections also has been driven by the tremendous growth of the corpus of knowledge during the latter half of this century. The emergence of new disciplines such as astrophysics and ethnomusicology, and the coalescence of multifaceted disciplines such as ecology or area studies, have all produced new bodies of information that must be acquired and maintained by the academic library. At the same time, much academic

research has become increasingly specialized, focusing on very narrow aspects of particular disciplines, and the published results of this activity also must be identified and made readily available.

The demand for this constantly expanding body of knowledge by the academic community is reflected in use of the library collections. Virginia's public and private academic libraries circulated approximately 4.4 million items during 1986-87, and this volume of activity does not account for either in-house use of the collections or the photocopying of non-circulating materials. Moreover, the development of computerized bibliographic databases during the past decade has enabled the academic library patron to identify and locate quickly and easily information resources not held by the institution. Thirty-nine Virginia academic libraries now provide electronic access to such databases, and during 1986-87 more than 74,000 literature searches were conducted using automation. This bibliographic service, identifying the existence of needed materials held by other libraries, is a major factor in the growth of interlibrary loan transactions. During 1986-87, more than 191,000 items were lent or borrowed by Virginia's academic libraries, a 900 percent increase over the level of that activity in 1968-69.

The growth of Virginia's academic libraries during the past two decades is reflected in the expansion of the institutions' library facilities. The increasing size of the collections needed to support new programs and research has required additional stack space. Larger numbers of students and faculty must be provided reader space in which to use the collections. Additional space has been needed to house multi-media ma-

terials and equipment as well as devices which support automated library functions and services.

The need for additional space to support the increasing demand for library services has been addressed during the past two decades by erecting new facilities and renovating and expanding existing ones. The libraries of Virginia's public and private academic institutions now occupy more than 2.6 million assignable square feet (ASF) of space, a 110 percent increase from 1967-68. Nevertheless, current growth projections suggest that an additional 1.17 million ASF, or approximately 27 acres, of space will be required by 1997 by just the libraries in the 39 public institutions.

There is a synergistic relationship between the amount and kind of space required by the academic library and the teaching and research activities of the institution it serves. Just as the stack and reader space has increased with the growing size of the collections and the academic clientele who use them, so has the configuration of the library space changed the way the information resources are used. Closed stacks and large reading rooms have given way to open-access shelving and individual study carrels. The availability and immediate access to the information resources of the library has likewise influenced the expansion of the institutions' program offerings, especially at the graduate level, and provided the necessary support for advanced research. This relationship between the library, both as information resource and as facility, and the academic endeavor it serves has existed in the past primarily within the institutional environment. It is now increasingly affected by an external factor, the development of new technol-

ogies, that already is altering the dynamics of the creation, retention, and dissemination of information.

EMERGING TRENDS IN INFORMATION TECHNOLOGY

Recent developments in information technology are changing the ways in which informa-



tion is collected and assimilated into the living body of knowledge. Although much of the theoretical development of the new technology has been grounded in academic research and the products of this activity are very useful to academics, the actual application of the technology to the creation of new, and sustenance of existing, information resources generally has occurred outside the academy.

The publishing industry, whether trade or academic, for several centuries has been the principal means of recording and distributing information in written and graphic formats. During the past several decades, changing economic conditions have affected greatly both the processes and volume of production in the industry. The inflationary spiral of costs of materials and labor has encouraged automation, and computer-based text processing and press preparation are now the norm. Automation has enabled the industry to keep pace somewhat with the exponential growth of information and scholarly writing, but it has not contained the costs of publishing.

The ever-growing number of monographic and periodical publications has been accompanied by even greater price increases: between 1965 and 1985, the average cost of periodical subscriptions received by Virginia's academic libraries increased by 575 percent. Moreover, although the number of published works continues to increase, recent changes in federal tax regulations that impose tax liability on unsold inventory have caused American publishers to reduce the size of press runs and shorten the period during which new titles remain in print.

Computer applications in the publishing industry also have created new ways in which in-

formation is made available and delivered to the user. Texts that integrate prose and graphics are easily composed by computer, and current research in scientific and social science disciplines increasingly receives first publication on computer-produced microfilm. Other lengthy reference texts which require periodic revision, such as encyclopedias and annuals, are now issued on computer-produced videodiscs or compact discs. Computerized preparation and storage of textual materials likewise has spawned new publishing ventures, ranging from on-demand production of topical anthologies of writings in highly specialized disciplines to continuously changing works-in-progress in the *belles lettres*.

While the publishing industry remains the principal conduit of the printed artifacts of scholarship produced by and distributed within the academy, a parallel and competitive source of information has developed in the private sector to which the academy has only limited access. This information source, made possible by the new electronic technologies, is the automated databases created and maintained by both the private and public sectors to feed the insatiable demand for current data to support managerial and decision-making processes.

The collection and transfer of information within the private sector has become a growth industry in its own right. Citicorp, for example, now spends annually more than \$850 million on information systems technology to support the daily transactions of banking and to accumulate information about financial and economic conditions worldwide. Similar databases have been established by other major corporations. Likewise, new for-profit companies have been found-

ed to provide information services to business and industry.

Although the academic library remains the preeminent conservator and provider of information to the academy, the recent emergence of what is euphemistically identified as "the Information Industry" offers an additional resource for the information consumer. This new resource differs from those of the traditional academic library in several important ways.

First, the size and scope of new information sources is constantly expanding and is available from multiple access points. In the field of business alone, there are now more than 2,000 proprietary databases currently maintained by approximately 130 companies or other organizations. Second, the use, and usefulness, of the new information sources is defined solely by the user. The automated environment permits the database to be searched randomly within user-defined parameters without regard to context or lasting relevance. Third, access to these resources is restricted by economic considerations. The automated databases, whether created by private or public sector initiatives, entail access and user fees and the acquisition of the computer equipment required for linkage to the computer environment.

These factors present a serious challenge to the academy. Quick and easy access to the automated databases provided by the automated environment is a compelling attraction for the information-hungry scholar, but it obscures the basic question of the authenticity of the information itself. The databases can and often do become accumulations of unedited quantitative data, unrefereed research reports, and specialized topical studies of the minutiae of contempo-

rary issues.

The new information technologies, by providing an almost infinite variety of data, greatly expand the opportunities for productive scholarship. But the broad inclusion and scope of the databases can adulterate and obscure more authoritative and seminal works. They therefore require careful treatment by the disciplined scholar. The metamorphosis of information into knowledge requires thoughtful discrimination and judgment, and the advent of the new resources makes these attributes even more necessary.

The emergence of the new information technologies also presents an important ethical dilemma. On the one hand, the growth of knowledge generally benefits humanity, and the expansion of the information resources provides additional fuel for the academic engine. On the other hand, these new resources are surrounded by economic and technological barriers that limit access and dissemination. If knowledge is power, then to what extent can contemporary society accept or tolerate additional restrictions to the means to power?

THE IMPLICATIONS OF NEW INFORMATION TECHNOLOGIES FOR ACADEMIC LIBRARY SERVICES AND FACILITIES

The development of the new information technologies has profound implications for the mission and environment of the academic library. The library must absorb the products of these technologies or face a diminution of its usefulness as the principal locus of information resources for the academic community. Not only does the technology provide new means of access to greatly expanded information resources, it

also expands the boundaries of the library's service area well beyond the campus.

The most important, although not necessarily most visible support provided by the academic library has been in directing students to organized, systematic bodies of knowledge. Through the classification and arrangement according to a taxonomy of disciplines, the library user is presented with an array of materials physically arranged in concentric patterns ranging from specific topic to broader subject field and, ultimately, to related disciplines. Bibliographic resources likewise provide identification of similarly arranged holdings of other libraries. Whether resident on campus or elsewhere, the library has been the starting point in the quest for information.

The new information technologies are changing the way in which the academic community identifies and acquires access to information. Electronic communications technology and the development of computer databases permit direct access to, and immediate delivery of, information to any properly equipped user regardless of physical location. Moreover, the academic library no longer provides the sole point of access to information on the campus. The institutional computer center maintains or provides access to databases that support instruction and research. Digital communications networks within and among institutions link academic computers and provide gateways to the information resources of academic service organizations and quasi-public bodies such as EDUCOM and the Virginia Center for Innovative Technology. Although the academic library often is included within this network architecture as one of many access points, the library is nei-

ther the manager nor the principal repository of the information resource.

The academic library must continue as the preserver of accumulated wisdom and knowledge and as the repository of new information. These intellectual resources increasingly will be housed in electronic formats and decreasingly in printed form. During the three millennia spanning the history of written thought, the codex book has been the principal medium of record for less than 500 years, only recently supplanting the papyrus scroll as that had supplanted the clay tablet. The introduction of the technologies of papermaking and moveable type ensured that the intellectual renaissance of western civilization would be preserved. This predominant medium for the retention and distribution of information has been challenged by the advent of electronic technology, and the twentieth century has witnessed the dawn of what has been called the "Information Age."

Electronic access to the new information resources is spread throughout the university wherever personal computers or peripheral devices are located, ranging from computer centers, classrooms, and laboratories, to faculty offices and student dormitory rooms. These new points of direct access to information resources threaten to remove the academic library from its connective role in the dynamic relationship between the academy and the body of knowledge it studies, interprets, and creates. But this role becomes increasingly vital to the academy as the exponential growth of the new information resources threatens to overwhelm the scholar with a surfeit of databases. To maintain and expand its usefulness to the academy, the library's service function must encompass all aspects of a

new information cosmos, of which the academic library collections are only one, albeit important, part.

The redefinition of what the academic library is and what it does affects the facility that houses it. "Form follows function" is an operative architectural principle in the design of the edifices that house the tangible records containing information. Academic library buildings now in use generally provide adequate facility support for the preservation and dissemination of printed information. In the future, they also must absorb and support the electronic environment which houses and provides access to the new information resources.

Redefining the academic library will not be easy. It will require changes in the way the library, as a component of the institution, is organized and managed. More importantly, it will require a change in the perception of the library's place and role within the academy.

THE FUTURE OF VIRGINIA'S ACADEMIC LIBRARIES IN THE AGE OF INFORMATION TECHNOLOGY

During the past decade, Virginia's academic libraries have begun the process of adopting new technologies. Forty academic libraries, including those in all 15 senior public institutions and in 24 private institutions, are now members of regional library service utilities. The services provided by these utilities include access to the national bibliographic database and enable the participating Virginia libraries to create and maintain machine-readable records of current acquisitions.

Many of these libraries have begun converting the records of their retrospective monograph and periodical collections, and several, including



George Mason University and Old Dominion University, have completed this process. The other senior public institutions have made slow but steady progress, and only one-fifth of their records, approximately 1.2 million titles, still await conversion. A much larger percentage of the bibliographic records of the public two-year and private academic libraries remain unconverted, however, and the evolving electronic database consequently identifies only a portion of the total holdings of Virginia's academic libraries.

The bibliographic database is distributed among the contributing libraries and housed in a variety of automated library systems. Electronic access to the collective database is limited, however. The bibliographic records housed in the national utilities are accessible only by member libraries, and many of the local databases can be accessed only by those libraries whose computers and operating systems are compatible. Despite the development of specific electronic linkages such as that used by the University of Virginia and Virginia Tech to share bibliographic records of current periodical subscriptions, and the emerging potential for electronic communication among the clusters of libraries using the same automated library system such as VTLS, Virginia's academic libraries have not yet established the common technological foundation needed to create and support a statewide library network.

The lack of a library network not only precludes electronic identification of Virginia's library resources but also impedes the flow of information to users. Access through the library to electronic databases is likewise possible only in those few libraries which have on-site terminals. Likewise, needed materials from the printed collections in the academic libraries must be physically transmitted to the external user because most of the libraries do not have modern telefacsimile transmission equipment.

The Council's 1986 study of academic library facility needs suggested various applications of new technologies to resolve the continuing need for space to house the library collections. Several of these suggestions have been implemented. The University of Virginia proposes to erect a high-density shelving facility to house 1.6 million volumes at a cost which is

approximately one-third of that for traditional library stacks with equal capacity. Other institutions are putting high-density shelving into proposed library additions. Moreover, several institutions have received grants from the Council's Cooperative Library Services program to transfer existing printed materials to compact disk or to create new information resources in electronic format.

All of these activities, while important first steps in adopting the new information technologies, are fragmentary and uncoordinated. In order for Virginia's academic libraries to provide efficient and effective support to teaching and learning in the Information Age, coordinated action is necessary. The resources and services of the libraries need to interrelate and interact not only within the statewide academic system but also with all other nodes of the global information resource upon which the academy relies. The focus of future action therefore should be to ensure that Virginia's information resources are acquired, maintained, and accessible within the context of the electronic environment.

To achieve this important goal will require systematic planning and establishing new priorities. It will change the way the academic library collections, operations, and facilities are funded. And, most importantly, it will change and expand the definition of library services.

To be effective, Virginia's academic libraries must provide electronic access to information resources. The bibliographic records of holdings of each library should be converted to machine-readable form to permit electronic verification of the presence of needed resources within the Commonwealth. Appropriate equipment should be installed in each library to support the electronic delivery of the resources to the user, via

telefacsimile transmission for hard-copy items and via digital transmission of new machine-readable media.

The establishment of a library network and statewide bibliographic database will support and encourage collection management and resource sharing by assuring identification and access to holdings within the Commonwealth. Through analysis of the statewide bibliographic database, duplicate copies of seldom-used monographs and periodical back-runs can be identified. One copy having been designated for permanent retention as the state's copy of record, identifiable electronically and accessible through physical or telefacsimile transmission, the duplicate items can then be withdrawn from the other collections.

The elimination of duplicate holdings of seldom-used items from individual collections will be only one aspect of statewide collection management made possible by a network environment. When it is fully established, electronic access to the statewide bibliographic database will enable each library to monitor the current acquisitions of the network members and thereby avoid purchasing expensive, specialized research materials already acquired by another library. Moreover, as publication in electronic format increases in the future, the network will support immediate access to these items no matter where they are housed.

In order to realize the full potential afforded by the networking environment, a system-wide allocation of responsibility for the maintenance and preservation of the information resources should be developed. Just as no single library could provide the resources and services to support the instruction and research in a particular

discipline throughout the state, neither can any single academic library provide complete support for the total teaching and research mission of its institution. The constant expansion of knowledge and information resources makes interdependence of the academic library community necessary. The development of the new information technologies makes it increasingly possible.

The future capital investment in the academic libraries should focus on supporting an electronic environment. For the immediate future, the principal medium for the dissemination of scholarship will remain the printed text. Virginia's academic libraries may well require additional stack space to house new publications, although this need can be reduced by high-density shelving for seldom-used research materials. The bulk of future capital appropriations, however, should be devoted to funding the constructing or renovating and equipping library facilities to house and support the electronic environment.

These actions are necessary for the academic library to evolve as an effective source of information in modern society. But they are not sufficient to accomplish this. The role and function of the academic library needs redefinition within the context of the emerging electronic environment in which information is created, preserved, disseminated, and transformed into knowledge. This requires a change in the perception of what the library is and what it does.

The current services of the academic library will continue—and expand—in the electronic environment. Some of the ambience of the traditional library facility may be lost. But the odor of mildewed bindings is not necessary to induce

and stimulate cognition, and the modern computer terminal is at least as quiet as the library reading room or carrel. The creative process occurs in the artist's studio or at the scholar's desk wherever it may be.

The library will continue to be the repository for collections of printed information, and it may indeed remain the primary source of materials for scholars in some disciplines. But those in other disciplines increasingly access electronic databases for most of their research material. The library must find a place as one node in a network of data sources. If it does this with foresight, its professional services will continue to be critical to scholars, whether they be students or faculty.

In many institutions, the library will continue to provide students with a reasonably quiet place for reading, writing, and study. In universities that often are crowded and busy, with limited space for solitude, this function cannot be ignored. The library as cloister will continue to have a place in colleges and universities. The civility and respect for scholarship that have given libraries their special character in the past must be preserved.

The academic library's evolution will affect the activities but not the role of the librarian. New technical skills to cope with the electronic environment and expanded awareness of the scope and limitations of new information resources will be needed. The evolution of book-oriented librarian into information specialist has already begun, as demonstrated by the recent restructuring of the curricula of the preeminent library schools to incorporate instruction in information science. The librarian will continue to serve the information user as interme-



diary, guide, and preceptor, but in different ways.

The transition of Virginia's academic libraries into a major information resource in an electronic environment will not be easy. It will require significant changes, some of them traumatic, to the current structure and organization of both the library and the institution it serves. There are important fiscal and legal questions which must be resolved in creating an effective electronic library network and a systematic process for the acquisition, management, and dissemination of information resources. No matter how complex these problems may be, they are neither irresolvable nor convincing arguments for the status quo. The transformation must begin immediately and must be pressed to completion if the libraries are to continue to serve the academy.

Report on Student Assessment

One justification for the large amounts of money America invests in public education has been the production of a workforce that could maintain American hegemony in the world marketplace. Because of the concern over the nation's diminished dominance and its effects on both national and local prosperity, because of a growing perception on the part of employers that the persons prepared in the educational system are less and less well prepared to function at the high level of skill necessary in an increasingly technological world, because of the increasing cost of education, and because of its obvious social failures, public anxieties about economic performance have translated into a concern about the quality of American education.

But public education has an even more fundamental function in this society: to ensure an active, intelligent, knowledgeable citizenry. Educators have been expected to transmit to their students societal values and the ability to make informed judgments in the forum as well as in the marketplace. To the extent that citizens lack basic intellectual skills, the American political process is threatened. Any failure of the educational institutions to teach those skills adequately thus has political as well as economic consequences. It also has personal ones: uneducated Americans are in a poor position to take advantage of the freedoms and opportunities offered by this society.

Public concern focused initially on the primary and secondary grades. In an effort to determine just how well founded were the criticisms about the quality of education in those grades, a number of state legislatures required schools to measure student learning and instruc-



tional quality. The object was twofold: to hold accountable deficient schools and to improve pre-collegiate education.

Attention has now shifted to the colleges and universities. Historically, the public has been willing to take on faith that the tax dollars invested in higher education were being wisely and profitably invested, a faith more easily held before higher education became accessible to large numbers of increasingly diverse citizens. It counted on the academic community to monitor itself, and indeed much self-evaluation was done. However, reviews of program and institutional quality focused almost exclusively on the processes, rather than the products, of education—for example the number of books in the library, the credentials of the faculty, the facilities—on the assumption that if all the elements presumed to be necessary conditions of good education were present, good education would follow. As the products of that education came into the marketplace, public skepticism about that assumption increased.

The skills and knowledge of individual students have traditionally been measured by grades and the distribution of course requirements. But as grades inflated and many programs seemed to produce graduates who were neither generally educated nor particularly skilled to do what they were certified to do, public confidence in the adequacy of those measures eroded. Furthermore grades, even when rigorously assigned, do not measure how well the student has synthesized the knowledge imparted in all the individual courses she or he has taken.

What, the public finally wanted to know, can college graduates be expected to know and be able to do? What in fact do the graduates of

any particular college or program know? Are tax dollars being well spent?

Enter student assessment. Student assessment differs from program evaluation in its focus on results: it attempts to determine not if programs have the wherewithal to meet their educational objectives for students, but rather if the students actually have met those objectives. It differs from grading in that the individual professor is no longer the sole arbiter of what a student should know and how well he or she has learned it. The program, institution, or state as a whole has articulated what it wants for its students and will measure whether those goals have been met.

States have responded differently to the perceived need to institute some form of student assessment. In some states, state-wide assessment programs and state-wide testing procedures have been established. In others, institutions have been encouraged but not required to develop individual student assessment programs. Virginia has charted a middle course: it has mandated student assessment but has allowed the individual colleges to develop or choose those assessment methods most appropriate to their very diverse characters and missions.

In this state accountability does not mean comparing one institution to another. Virginia has always recognized that there are many kinds of excellence and has supported a diversity of missions among its institutions of higher education. It wants only to know how well institutions are fulfilling their individual purposes and preparing to meet new challenges.

The Commonwealth has supported institutional autonomy in developing student assessment plans for another reason: such autonomy

makes it possible to go beyond using assessment for the purpose of accountability to an even more important one, the improvement of teaching and learning. Unless the means of evaluating student learning are directly related to the goals of individual institutions, they will not be able to use the results to improve through continuous faculty development and curricular change.

Through Senate Joint Resolution 125, the 1985 Virginia General Assembly directed the Council of Higher Education "to investigate means by which student achievement may be measured to assure the citizens of Virginia the continuing high quality of higher education in the Commonwealth." The study, presented to the 1986 General Assembly as Senate Document No. 14, was accepted in Senate Joint Resolution 83. In that resolution, the General Assembly requested institutions of higher education in the state individually "to establish assessment programs to measure student achievement," with the proviso that "the Council, in cooperation with the state-supported colleges and universities, should establish guidelines for designing good assessment programs and report to the public results of institutional efforts to measure student achievement in its biennial revisions of **The Virginia Plan for Higher Education.**"

A group of representatives from colleges and universities worked with the Council staff to establish guidelines that reflected the recommendations in Senate Document No. 14 and respected both the complexity of the Virginia system of higher education and the need to provide state-wide coherence to the assessment plans. The State Council approved the guidelines in April 1987 and passed them on to the colleges to

help them in formulating their assessment plans.

In their plans, the institutions were asked to identify or describe the following:

- Assessment procedures for general education
- Assessment procedures for the majors
- Alumni follow-up studies
- The skills necessary to do college-degree-credit work at the institution
- Procedures for identifying high-risk students
- Policies regarding placement of students doing remedial work in degree-credit courses
- Plans for remediation
- Methods of assessing the success of remediation
- The timetable for implementation of the assessment plan
- Procedures for evaluating the assessment plan
- Plans for faculty, student, and curricular development programs to address identified problems or deficiencies.

By 1989, institutions were asked to begin reporting the results of their assessment procedures. The Council cautioned that the published results of the assessment should be concrete, more than anecdotal, and presented in quantified form to the greatest extent possible.

All 39 public colleges and universities submitted student assessment plans in July 1987. Some were judged by the Council staff and the outside consultants brought in to review them to be adequate and some were accepted with stipulations. A few plans were vague or underdeveloped or demonstrated inadequate understanding of the nature of student assessment. They were rewritten.

In all the plans the colleges attempted to tailor the assessment measures to their particu-

lar missions and characters. They chose or made plans to develop a wide enough range of measures to do justice to the diversity of their programs. Many institutions built on already existing assessment efforts, which they will coordinate and supplement.

Devising ways to measure what students have learned from the general education component of the curriculum is perhaps the most difficult student-assessment task facing the institutions. Some institutions will begin by defining for the first time the goals of liberal learning to which all members of the institution agree. Then the task becomes to find or devise reliable methods to assess whether students have reached those goals.

Many Virginia institutions have decided to use national tests to measure the success of their general-education curricula. The two most commonly chosen tests are the American College Testing Program's College Outcomes Measure (ACT/COMP) and the Educational Testing Service's Academic Profile (ETS-AP). The former test measures the extent to which students have developed crucial thinking skills—communication, problem-solving, and the clarification of values—and acquired the knowledge of social institutions, science, and the arts thought to be essential to a liberally educated person. The ETS-AP is currently being piloted at approximately 200 institutions in the United States, among them several Virginia institutions. It will measure academic skills—reading, writing, critical thinking, and the use of mathematical data—in the context of the humanities, the social sciences, and the natural sciences. The institutions using these tests generally propose to administer them to a sample of students at the

beginning of their college careers and then again after they have completed the general-education requirements for the college.

Other institutions propose to develop their own measures for assessing general-education outcomes, including locally developed tests in the fields covered by the institution's general-education plan, student interviews, longitudinal studies, exit interviews, and alumni surveys of satisfaction with the liberal education offered by the college.

The community colleges faced a particular problem with respect to general education: whether to assess only college-transfer students or also students in the vocational-technical programs. Since the latter do have general education requirements, the reviewers employed by the Council recommended that the goals of those requirements be articulated and that attempts be made to measure whether they have been met. Most community colleges are still evaluating national tests of general education. The reviewers were concerned that mandatory general-education testing is apt to discourage community-college students from graduating. Consequently, they suggested that some less intrusive measures, such as alumni surveys, be considered. Since few of the community colleges have decided exactly how to assess general education, the colleges might well benefit from system-wide discussions about the goals of general education in the community colleges and the means of assessing whether students have reached them.

Faculty probably are better able to come to consensus on the common goals of the degree programs than on the goals of general education. But the number and diversity of programs



caused many institutions to introduce assessment in the majors over a five-year period.

Some programs—like nursing, allied health, education, and accounting—have certification examinations that already assess students' knowledge and skills in the field. Other programs find national examinations such as the Graduate Record Examinations appropriate to their programs and student bodies. However, the review team cautioned that if such examinations are to serve as assessment instruments, they should be taken not by a self-selected group of students but by a representative sample.

Faculty in a number of programs plan to develop their own assessment measures, including objective tests, portfolio reviews, senior projects, presentations, and seminars. Many departments also plan to use current-student, senior-exit or alumni surveys to measure student satisfaction

with the major. Employer surveys or job-placement records to measure employer satisfaction with the graduates of the program were a feature of a number of plans, particularly in the community colleges.

The community colleges also will rely on reports from the four-year institutions about their graduates to measure the success of their college-transfer programs. The data that are needed by both high schools and community colleges to assess the effectiveness of their programs and the method for reporting those data are currently being determined by a state-wide task force composed of representatives from the Council staff, the community colleges, the high schools, the Department of Education, and the four-year institutions.

One of the ways in which acceptable quality can be ensured is to make sure that no one

takes courses for college credit who does not possess adequate academic skills. Another state-wide task force is working to determine the minimal skill levels below which no student in the state will be allowed to do work for college credit. In addition, the student assessment guidelines recommend that each college describe the verbal and quantitative skills necessary to do college-level work at that institution, since many institutions will set their thresholds above the minimum. Colleges were also asked to describe how they identify high-risk students, how they test them to determine if they need remediation, the nature of their remediation programs, and how the success of that remediation is measured.

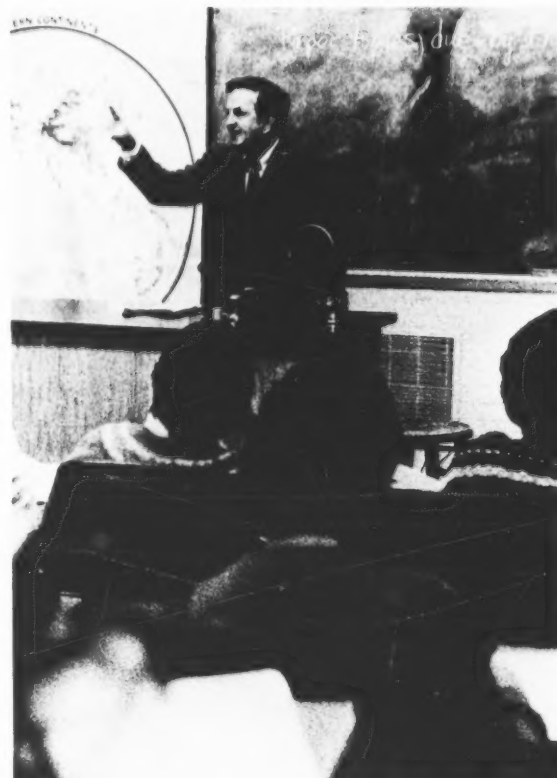
Since even the selective institutions in the state, in the name of diversity and access, admit some high-risk students, almost all already have

in place procedures to identify such students, generally by SAT scores or by high-school grades or rank well beneath the norm for admitted students and by specific course deficiencies. Those students may or may not be tested, either by locally developed English and mathematics tests or with a standardized instrument such as the Nelson-Denny Reading Test, the Test of Standard Written English, the Comparative Guidance and Placement Test, or the College Placement Test. Students are then placed, if appropriate, in a remedial program or a transition program which generally combines advising, training in academic skills, and tutoring. Two senior institutions have arranged to have remediation offered by the faculty of local community colleges. Few institutions now have systematic procedures for tracking the success of students who complete the remedial programs, but most have plans to develop such procedures.

In the final analysis, the educational success of a college is measured by the satisfaction, success, skills, knowledge, contribution, and responsibility of its graduates. Alumni surveys of some sort are conducted by most colleges, if only to generate alumni support, but many colleges now plan to approach their alumni more systematically to assess the results of general education and the majors, as well as the satisfaction graduates feel with the education they received. Some institutions plan to interview a sample of graduates. Most are still in the process of deciding what questions they want their alumni to answer and how to coordinate their surveying efforts.

James Madison University was given special funding in the 1986-88 biennium to develop a pilot program in student assessment, and its

plan demonstrates the results of several years of work. Student assessment there is tied into a larger process of evaluation and curricular change which goes beyond the state guidelines. Madison is interested in determining how well students are being challenged by the curriculum. It, like Old Dominion University, wants to assess not only the outcomes of general education but whether skills such as writing, critical thinking, and problem-solving have been taught throughout the curriculum. It, like Longwood



College and Northern Virginia and John Tyler Community Colleges, is also interested in the affective aspects of college education—for instance, how do students feel about themselves and others; how committed, empathetic, and involved with others are they; how morally and emotionally developed are they? It has gone further than other institutions in implementing assessment measures to find the answers to these and other questions.

Old Dominion has several elements of student assessment already in place: a well developed program to evaluate high-risk students and to monitor the future success of remediated students, a general education program whose goals have been agreed to and articulated by the faculty, and a writing program that requires all students to demonstrate their proficiency both at entrance and as a condition for graduation. Building on those strengths, they will measure students' perceptions of the quality of academic programs and services at the university through the College Student Experiences Questionnaire, an opinion survey that a number of other institutions are also considering.

Virginia Tech sees undergraduate student assessment as only a part of the evaluation of its overall effectiveness. It has a sizable graduate population, as well as a significant commitment to research and, as a land-grant institution, to public service. Tech developed its undergraduate student assessment plan within the context of the Southern Association for Colleges and Schools' mandate that overall institutional effectiveness be measured. Therefore the evaluation program at Tech will eventually reflect the full scope of activities within the university. Tech plans, for instance, to assess both

undergraduate and graduate student outcomes, as well as the research and public service programs. It, like Richard Bland College, plans to find out how satisfied students are with the administration of the college. It will use graduate students in higher education administration to work on the outcomes assessment project, so that their graduate training is improved as the university is served. Because of the diversity of its programs, the university has developed a list of 18 ways by which academic programs may choose to measure their effectiveness. The Virginia Tech plan, in short, reflects the complexity of the institution.

There are elements of almost every plan that go beyond the guidelines to reflect the concerns of the individual institutions. Norfolk State University and the University of Virginia monitor the progress of the students in their gifted programs. Virginia Military Institute, in accordance with its special mission, will assess the physical fitness of its students. The University of Virginia will do intensive interviews of a sample of students over the four years they spend as undergraduates to evaluate the effects of general education. J. Sargeant Reynolds Community College, like several community colleges, has integrated its student assessment plan into its 5-year evaluation of all certificate, diploma, and associate in applied arts degree programs.

Many colleges plan to institute measures of student satisfaction; longitudinal studies of their graduates; retention studies; and interviews of seniors, withdrawing students, and employers. Community colleges are particularly committed to finding out whether they are meeting the needs of the communities they serve and in ana-

lyzing the nature and needs of their highly diverse student bodies.

The development of these plans will take time. Goals must be set; faculties involved; resources committed; various measures tried, evaluated, modified, and discarded; and data analyzed. The better plans had specific timetables for implementation and evaluation clearly designated. But given emerging national experience, the five years many colleges allotted to the full development of their programs may be only the



beginning of a fruitful process of self-examination.

Of course that self-examination will be fruitful only if it leads to educational improvement. Faculty development is crucial to the main purpose of assessment: the improvement of student learning through improved curricula. A new curriculum is not going to be developed or taught by faculty who remain the same, and faculty with new skills or knowledge will transform the curriculum even when they teach the same material. Faculty development closes the loop between the curriculum and student learning. Therefore the State Council of Higher Education has decided to award the next biennium's Funds for Excellence grants to curricular and faculty development projects. This will give the faculty and administrators who want to use the results of assessment to improve the quality of education on their campuses the leverage and support they need to do the job.

In future revisions of the plans, colleges and universities will be expected not only to report results but, more important, to show how the information collected has benefitted faculty, students, and the curriculum, as well as tell what effects the process has had on other parts of the institution—for example admissions, career planning, or advising. The process might well lead institutions to assess outcomes in areas not covered by the plans, such as graduate programs. The Council will ask them to cooperate, to share ideas, to work together in ways that they have not done in the past.

In his budget memos, the Governor told institutions that an adequate student assessment plan is necessary to be eligible for initiative funding in the 1988-90 biennium. The Council

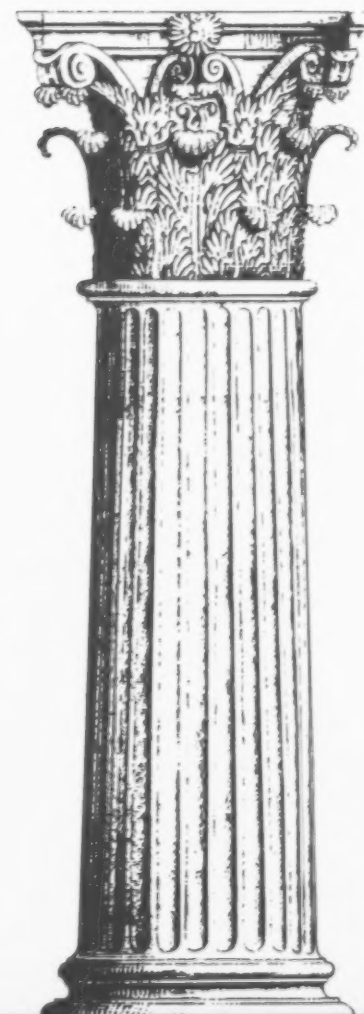
recommends that the Governor make continued progress in assessment a condition of eligibility for incentive funding in the future. At the same time the Council recommends that the Commonwealth support assessment with adequate funding and help institutions acquire resources for faculty and curricular development. In addition to substantial commitments of time and energy by existing staff and faculty, evaluation of this magnitude requires resources that institutions do not now have and that will need to become part of their on-going operations.

Assessment should become, over time, an aspect not only of evaluation but of the curriculum itself. Assessment, at its best, can be a learning process for all participants: for the state, which learns which institutions are producing which results; for the institution, which learns how well it is accomplishing the goals it has set itself; for the individual teacher, who learns where she or he has been effective and where not; and for the student, who develops the capacities for self-reflection and self-evaluation.

Institutional Narratives- Public Institutions

The narratives of the state-supported institutions are an essential component of the *Virginia Plan for Higher Education* because they provide a historic perspective on each institution as well as an indication of the institution's aspirations. Each narrative, which was prepared by the respective institution specifically for the *Virginia Plan*, presents a clear indication of the institution today and what it hopes to be in the future.

The narratives follow a similar format to ensure uniformity in content and the inclusion of comparable information. Each narrative has four parts. The first part describes the history and development of the institution from its establishment to the present. The second part contains a statement on the purpose of the institution while the third part indicates the extent of the institution's instruction, research and public service activities. These three activities are generally considered the principal functions of higher education. Finally, the fourth part discusses the institution's future plans. In addition, Student Assessment Plan charts are included with each narrative.



Christopher Newport College

Newport News

HISTORY AND DEVELOPMENT OF THE INSTITUTION

In 1960, the General Assembly of Virginia established Christopher Newport College as a non-residential branch college of the College of William and Mary and located it in Newport News. Subsequently, the Board of Visitors of the College of William and Mary authorized the branch institution to offer a lower-level undergraduate liberal arts curriculum leading to the Associate of Arts degree. From 1961 to 1969, the College matured as a two-year institution, and in 1969 the Board received approval from the General Assembly to broaden the role of the College by adding upper-level curricula leading to the Bachelor of Arts and Bachelor of Science degrees. Between 1969 and 1976, the College initiated several specialized baccalaureate programs leading to Bachelor of Science in Business Administration, Bachelor of Science in Information Science, and Bachelor of Science in Governmental Administration degrees.

In its 1976 session, the General Assembly established Christopher Newport College as a four-year baccalaureate institution, independent of the College of William and Mary. The operation of the College was transferred to the 14-member Board of Visitors of Christopher Newport College on July 1, 1977. The College has since implemented programs of study leading to three additional degrees: Bachelor of Science in Accounting, Bachelor of Science in Nursing, and Bachelor of Music. As it enters its twenty-seventh year, the College offers 49 different majors and concentrations under seven baccalaureate degree programs.

In September 1961, the College enrolled an initial student body of 171 at its original location, the John W. Daniel School, a former public

school building in downtown Newport News. In 1963, the city purchased and deeded to the Commonwealth the 75-acre tract which is now the campus of Christopher Newport College. Over the years the on and off-campus student body of the College has grown to more than 4,400. Ten modern buildings with more than 320,000 square feet of floor space have been erected on its new campus. A total annual operating budget of approximately \$15,900,000 supports its overall operation.

The College draws many of its students from the Virginia Peninsula and the surrounding counties beyond the York and James rivers. Increasing numbers of students from Norfolk, Virginia Beach, and Chesapeake have augmented this majority. The student body has been, and is, a blend of full-time and part-time students,



degree-seeking and unclassified students, and permanent as well as transient residents of Tidewater. While elements of the blend have remained constant, the relative proportions have changed annually.

The Fall 1987 student profile illustrates the current mix: 91 percent state residents, 9 percent out-of-state; 84 percent white, 16 percent non-white; 60 percent female, 40 percent male; 34 percent age 21 or less, 17 percent age 35 or more; 79 percent transfers from other institutions; and 60 percent degree-seeking, 34 percent unclassified. One of the most remarkable features of the student body is the cosmopolitan flavor derived from its large number of transfer students. In the Fall 1987 semester, for example, they numbered 3,468 and represented 763 accredited colleges and universities—including at least one college or university in 50 states and the District of Columbia.

As of Fall 1987, 131 persons held faculty positions in the 19 academic departments of the College. They held 344 earned degrees, 88 of which were earned doctorates at colleges and universities in 41 of the 50 states, the District of Columbia and ten foreign countries. Prominent and highly respected members of the Commonwealth's industrial, commercial, professional, scientific, and artistic communities form the College's adjunct faculty. The faculty is organized into three schools—Letters and Natural Science, Social Science and Professional Studies, and Business and Economics.

PURPOSE OF THE INSTITUTION

Christopher Newport College is a comprehensive, coeducational, urban institution of higher education. Within the context of liberal

CNC Assessment Plan	
GENERAL EDUCATION	Goals already established. Plans to use external reviewers and continue internal committee review process of general education.
MAJORS	A 5-year rotating program-review schedule was implemented in 1985.
ALUMNI FOLLOW UP	Plans to implement systematic after-college survey.
REMEDATION	Required of all students with SAT scores of less than 400 on verbal and math tests.
SUCCESS OF REMEDIATION	Will track performance of students. 1986-87 data has been gathered.
TIMETABLE FOR IMPLEMENTATION	Some activities in process, with others planned over the next 3 years.
PROCEDURES EVALUATION	External evaluators will be used.
DEVELOPMENT PROGRAMS	Faculty development encouraged through interaction with external consultants.
OTHER	None

learning, the College is committed to meeting the needs of its constituencies through excellence in instruction and through public service and research.

The broad purpose of the College is to be an informed transmitter and disciplined interpreter of the past and an intelligent developer of the present and future so that its students may move toward freedom in thought and action. To these ends, the College has organized baccalaureate programs to affirm the methods, values, and insights of the traditional liberal arts disciplines, and the importance and promise of the rapidly evolving areas of high-technology, human service and professional studies. The pat-

terns of enrollment and graduation illustrate the interactive nature of the elements of this plan. In Fall 1987, enrollment was distributed among the three Schools as follows:

Letters and Natural Sciences	41%
Social Sciences and Professional Studies	35%
Business and Economics	24%

Graduations in 1987 produced these results:

Letters and Natural Sciences	23%
Social Sciences and Professional Studies	30%
Business and Economics	47%

The College believes that it has a responsibility to offer academic programs and education-

al services appropriate to a mobile, urban, technological, commercial, and increasingly sophisticated society, and to make the Greater Hampton Roads the special focus for these activities. This is reflected in the College's range of degree programs; in its cooperative agreements with area colleges and universities; in its student transfer arrangements with the Virginia Community College System; in its policies governing admission, transfer, and graduation; and in its counseling programs and continuing education activities.

The College also recognizes its obligation to extend its resources throughout the service area by offering coursework and other services at suitable off-campus locations; and it is committed to the development of courses and services which turn the best resources of the Peninsula—its museums, research centers, and people—into educational advantages for the Commonwealth.

THE ROLE OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE WITHIN THE INSTITUTION

The first priority of Christopher Newport College is instruction, but research and public service are significant ingredients of its comprehensive academic enterprise. The College provides classes throughout the year: day and evening, weekday and weekend, on-campus and off, credit and non-credit. Public service activities include a monthly business and economic newsletter, a speaker's bureau, several community concert series and theater productions, community development programs, consulting services, and adult education, recreation, and leisure programs designed by the Office of Continuing Studies. The College's research activities have resulted in the establishment of cooperative re-

lationships with the National Aeronautics and Space Administration, the Continuous Electron Beam Accelerator Facility, the Mariners' Museum, and various social and business agencies in the community. The annual dollar value of research conducted in conjunction with the College regularly exceeds \$125,000.

THE INSTITUTION'S FUTURE DIRECTIONS

Christopher Newport College is committed to continue its evolution as an institution for both traditional and nontraditional students, as a lifelong learning center for the citizens of its expanding service area, and as a focal point of both pure and applied research activity. The College believes that educational growth at both undergraduate and advanced levels of study shall occur as the Greater Hampton Roads emerges as one of the Commonwealth's economic development centers. The College intends to pursue its commitment to serving the educational needs of the Virginia Peninsula through the development of appropriate new academic programs. By the turn of the century, the College expects the student body to exceed 5,000 students.

Christopher Newport College anticipates that the coming decade will require a building program to include a library addition, an expanded physical education and convocation center, a performing arts center, appropriate residential facilities, and the modification of existing structures to accommodate expanding and changing functions.



Clinch Valley College of the University of Virginia Wise

HISTORY AND DEVELOPMENT OF THE INSTITUTION

In 1954, the General Assembly established Clinch Valley College as a two-year branch of the University of Virginia, and in 1968 elevated the College to four-year status. The College was initially established to provide post-secondary educational opportunities to the citizens of far-southwestern Virginia. The closest senior state-supported institution is 150 miles away; therefore, Clinch Valley College plays a significant role in providing educational opportunities to its region. The first Bachelor of Arts degrees were awarded in 1970 and the first Bachelor of Science degrees in 1973.

In Fall 1987, the College registered a total of 1,463 on- and off-campus students of whom 867 were full-time and 596 were part-time. Of those students, the overwhelming majority were from Virginia. Until the early 1970s, the College primarily served commuting students from the local area. Since then, increasing numbers of students from outside the local area have been enrolling. More than a third of the full-time students now live on the 400-acre residential campus adjacent to the town of Wise.

PURPOSE OF THE INSTITUTION

Clinch Valley College is a four-year, coeducational, residential, comprehensive undergraduate college. The purpose of the College is to provide high quality education in a small, residential college setting with close and caring student-faculty relationships. Avoiding the trend toward narrow, vocational studies, the College strives to provide knowledge and understanding essential to a rich and full life. To achieve this end, the institution is committed to offering activities designed to quicken, discipline and en-

CVC Assessment Plan	
GENERAL EDUCATION	ETS-AP. Oral and written communication and analytical skills across the curriculum.
MAJORS	Instruments determined by faculty in each department, beginning in fall 1988 with history and biology. Includes GRE, MCAT, NTE, LSAT, and senior papers.
ALUMNI FOLLOW UP	Placement survey currently being studied. A comprehensive institutional survey by an independent company every 4 years. Department/major surveys beginning spring 1989.
REMEDICATION	Assessment of functional skills based on grades, GPA, class rank, SAT or ACT scores. For high risk students: 1) conditional admission, 2) summer trial period or 3) summer transition program. Currently placement tests (pretests) in English and mathematics; successful completion of remedial coursework determined by respective departments.
SUCCESS OF REMEDIATION	Post-tests in both areas under study or developed by 1988-89. Longitudinal data on all freshmen collected by Admissions Committee.
TIMETABLE FOR IMPLEMENTATION	Assessment model set to begin with freshman class of 1988.
PROCEDURES EVALUATION	External and internal evaluation by Student Programs and Assessment Committee and consultant.
DEVELOPMENT PROGRAMS	To be developed.
OTHER	Specially trained freshman advisors to monitor progress in remedial and college-level coursework. Assessment model includes 12 other areas, from advising program to student life; instruments or measures to be developed. Appointment of assessment coordinator and Student Programs and Assessment Committee in Summer 1987.

large the intellectual and creative capacities of its students. Students are encouraged to develop resources which they may draw upon throughout their lives.

The College has eight academic divisions: Business Studies, Education History and Philos-

ophy, Language and Literature, Mathematical Sciences, Natural Science, Social and Behavioral Sciences and Visual and Performing Arts. Baccalaureate programs in many of the liberal arts areas are offered as well as in the professional areas of business, education and medical tech-



nology, all of which have a firm liberal arts base.

EXTENT OF THE INSTITUTION'S MIX OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE

Effective teaching is the primary focus of Clinch Valley College. The College strives for excellence and quality in the 14 baccalaureate degree programs and the three two-year certificate programs offered. While research activities

are generally limited, individual faculty members work constantly to strengthen themselves in their academic specialties.

Clinch Valley College is very sensitive to the public service needs of the community. The College has made continuing efforts to provide educational opportunities as well as cultural programs in the arts and the humanities to meet special community needs. Alumni activities, Elderhostels, and Governor's School for the Gifted Programs, courses for industrial employ-

ees, and numerous conferences and workshops provide educational opportunities for senior citizens, potential undergraduates and part-time students pursuing special interests.

An electronic classroom allows transmission of courses from the University of Virginia and other universities, with students receiving lectures via a television screen and responding by microphone. As part of its economic development activities, the College has established a branch of the University of Virginia Institute of Government/Center for Public Service on its campus.

THE INSTITUTION'S FUTURE DIRECTIONS

Clinch Valley College expects a gradual increase in enrollment through 1992. To accommodate the growing number of students, the College is expanding its building program, particularly with respect to improving residential life, and has opened a second apartment-dormitory. Planning is under way for a fine arts center. Emphasis on the improvement of institutional programs will continue, as will attention to public service—especially those activities that affect the teaching mission.

The College will continue to better develop its curriculum, whenever possible, offering opportunities which prepare students for the Information Age. Existing programs will be expanded and developed as necessary to meet growing student and societal needs.

It is a goal of Clinch Valley College to bring graduate study opportunities to the residents of Southwest Virginia. It is hoped this will be accomplished through cooperative arrangements with the University of Virginia and Virginia Polytechnic Institute and State University.

The College of William and Mary

Williamsburg

HISTORY AND DEVELOPMENT OF THE INSTITUTION

The College of William and Mary, founded by royal charter in 1693, is the second oldest institution of higher learning in the United States. After the American Revolution, it continued under private auspices. The College first received support from the Commonwealth in 1888, and in 1906, by act of the General Assembly, became a state institution with its Board of Visitors appointed by the Governor. In 1968 William and Mary was recognized as a university. The Board of Visitors of the College also has responsibility for a two-year junior college, Rich-

ard Bland, located in Petersburg.

William and Mary today is a coeducational state university serving the Commonwealth and the nation. It consists of the Faculty of Arts and Sciences and the Schools of Business Administration, Education, Law and Marine Science. Besides the baccalaureate in arts, science, and business administration, the College offers the master's degree in 17 fields and the doctorate in seven, in addition to the Juris Doctor in law. The undergraduate student body numbers approximately 4,900; the graduate and advanced professional enrollments number 1,900 students.

Approximately 66 percent of the students are from Virginia; the remainder are from some 36 states and foreign countries.

Although the main campus of William and Mary is in Williamsburg, the school of Marine Science located 15 miles away at the Gloucester Point campus is an integral part of the College of William and Mary. As the Virginia Institute of Marine Science, it merged with the College in 1979.

PURPOSE OF THE INSTITUTION

William and Mary is, according to the institution, "a community of scholars seeking to expand the sum of human knowledge and to communicate that knowledge to all who wish to know." As such, the institution's goal holds that it "offers individuals the opportunity to acquire a broad understanding of the human condition through a liberal education and to add to the knowledge underlying that understanding by pursuing their intellectual and professional interests as far as possible within the resources at the institution's command."

To achieve its goal, William and Mary offers a highly selective full-time residential undergraduate program of national repute. In addition, it seeks to offer equally selective graduate and advanced professional programs in a number of fields appropriate to its history and location. About 83 percent of the undergraduates are in arts and sciences and education, the remainder in business administration. All undergraduate students receive a firm grounding in the arts and sciences in their first two years. William and Mary emphasizes close faculty-student interaction and attempts to provide relatively small classes at the undergraduate level.

W&M Assessment Plan	
GENERAL EDUCATION	Will assess through portfolio analyses, curricular comparison with peer institutions, course audits, alumni surveys, and graduating senior surveys.
MAJORS	Developing 5-year, multi-faceted evaluation for undergrad departments, including end-of-curriculum exercises, GPE's, external examiners.
ALUMNI FOLLOW UP	Follow-up will be through a revised alumni survey, alumni newsletters, faculty reports, and interviews.
REMEDATION	N/A
SUCCESS OF REMEDIATION	N/A
TIMETABLE FOR IMPLEMENTATION	5-year implementation plan with 3 major phases.
PROCEDURES EVALUATION	Steering Committee will regularly evaluate all aspects of university's assessment plan.
DEVELOPMENT PROGRAMS	None
OTHER	Will assess attitudes and values using C.I.R.P. and C.S.E.Q. surveys. Graduating Senior Survey.

The existence of post-baccalaureate programs brings to the entire College the curriculum benefits normally associated with larger institutions, such as the stimulation provided by research and publication as well as access to more sophisticated library and laboratory facilities.

At the advanced level, William and Mary offers the Juris Doctor and doctorates in computer science, history, marine science, psychology, physics, and education. In the fall of 1988, the College will offer a Ph.D. in American Studies. A Ph.D. program in applied science is expected to begin in the fall of 1990.

The Marshall-Wythe School of Law traces its ancestry to studies in the law first offered at the College in 1779. Affiliated with the School of Law is the Institute of Bill of Rights Law, which emphasizes the study of the First Amendment. The education program has been of importance to Virginia since 1906 when the Commonwealth assumed responsibility for the College with a primary objective to insure a source of trained public school teachers throughout the state.

In its history program, William and Mary benefits from its significant library holdings on the Colonial Period, from the growth of Williamsburg as a center for historical research since the founding of the Colonial Williamsburg Foundation in 1926, and from the campus presence of the Institute of Early American History and Culture. The Doctor of Psychology Program is offered jointly by William and Mary, Old Dominion University, Norfolk State University, and the Medical College of Hampton Roads in association with Eastern State Hospital.

For half a century William and Mary has made the marine interests of the Commonwealth a special concern, initially through the

Virginia Fisheries Laboratory and subsequently with the Virginia Institute of Marine Science at Gloucester Point. The College's highly respected Ph.D. program in physics and its Ph.D. program in computer science are closely associated with the National Aeronautics and Space Administration's Langley Research Center in Hampton and the Continuous Electron Beam Accelerator Facility (CEBAF) in Newport News.

William and Mary also offers the professional degrees of Master of Business Administration and Master of Education, and master's degrees in American Studies, anthropology, applied science, biology, chemistry, computer science, education, English, government, history, law and taxation, marine science, mathematics, physics, psychology, and sociology. In addition the School of Business Administration offers the Executive



Master's Business Administration degree, as well as part-time M.B.A. program study opportunities on the Peninsula.

EXTENT OF THE INSTITUTION'S MIX OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE

William and Mary's instructional emphasis is on providing its undergraduate students with an education grounded in the arts and sciences, and its graduate and advanced professional students the special skills needed for service in the public and private sectors.

William and Mary conducts both basic and applied research. Its research activity involves both contracts for programs and individual grants to faculty members. In 1986-87 the College, including the Virginia Institute of Marine Science, expended \$7.2 million in research funds.

William and Mary recognizes its public service responsibility to the Commonwealth by offering educational and cultural programs through the Office of Special Programs; an extensive marine advisory program; and expert consultation in a variety of educational, scientific, legal, and business fields.

THE INSTITUTION'S FUTURE DIRECTIONS TO 1990

During the next decade, its enrollment will likely increase slightly as new programs are inaugurated. New program offerings will emphasize areas in which the university can make a unique contribution to the Commonwealth.

With limited enrollment and highly selective admissions, it has a commitment to excellence in all of its educational offerings.



George Mason University

Fairfax

HISTORY AND DEVELOPMENT OF THE INSTITUTION

With the nation's capital at its doorstep, George Mason University, the state university in Northern Virginia, is in the mainstream of the political, artistic and professional life of the country.

A young, vigorous institution building toward the future, George Mason University is,



however, rooted in the academic traditions of Virginia. Established in 1957 under the aegis of the University of Virginia, it was named George Mason College after the Virginia statesman and patriot. The 1966 General Assembly changed its status from a two to a four-year institution. The college granted its first bachelor's degrees in 1968 and the first master's in 1971. On April 7, 1972, it became an independent state institution. In 1979, the General Assembly authorized the acquisition of a School of Law. Doctoral status was granted to George Mason in 1980, and the first doctoral degree was conferred in 1983.

The university grants 96 undergraduate, graduate and professional degrees, including a law degree, the juris doctor. Doctoral degrees are offered in economics, education, environmental biology and public policy, applied psychology, information technology, and public administration.

With more than 1,000 full and part-time faculty members, the university serves more than 18,000 on- and off-campus students through the College of Arts and Sciences, the College of Education and Human Services, the School of Business Administration, the School of Information Technology and Engineering, the School of Nursing, the Graduate School, the School of Law and the Division of Continuing Education. In addition, over 8,200 students enroll for the summer session.

In its early days, George Mason University primarily served commuting students from Planning District Eight. Though it has on-campus housing for only 1,800 students, its current student body has students from 31 states and 80 foreign countries. Of the 18,112 on and off-campus students who were enrolled at George Ma-

son in Fall 1987, there were 9,433 full-time students and 8,679 part-time students.

There are more than 100 recognized student organizations serving a student body of great diversity and interests. Student life on the campus has assumed the characteristics of a metropolitan university.

PURPOSE OF THE INSTITUTION

George Mason University provides a rigorous traditional education, enabling students to develop critical and analytical thinking. The university seeks to prepare students to interpret the complex questions facing them and society. It further seeks to meet the needs of students by providing the opportunity for innovative educational methods and programs, and it will enhance these programs with undergraduate, graduate and professional courses of study that are cross-disciplinary.

Its faculty must excel in teaching, be active in pure and applied research, and be responsive to the needs of the community.

Northern Virginia is a complex setting for a public university. With a population of 1.5 million, the region is a network of "urban villages" served by a knowledge-driven economy. The Northern Virginian lives and works in an environment combining historical and contemporary significance. Mount Vernon, Washington's estate, and Gunston Hall, home of George Mason, exemplify the tradition of an area that is experiencing explosive economic and population growth. The urban landscape is marked by the presence of firms and organizations such as IBM, Mobil Oil Corporation, Martin Marietta, the Jet Propulsion Laboratory of the National Aeronautics and Space Administration, the Soft-

GMU Assessment Plan	
GENERAL EDUCATION	Already assessing experimental general education curriculum programs. New GE curriculum being developed. In the interim, will be pilot site for ETS academic profile.
MAJORS	Each program will develop plans that will be incorporated into on-going program evaluation process.
ALUMNI FOLLOW UP	Part of comprehensive student cohort databank. Will augment current alumni follow-up surveys to include measures of satisfaction.
REMEDATION	Refer high-risk applicants to local community college.
SUCCESS OF REMEDIATION	N/A
TIMETABLE FOR IMPLEMENTATION	To be developed.
PROCEDURES EVALUATION	University committee will evaluate, using design reviewed by panel of outside experts.
DEVELOPMENT PROGRAMS	None
OTHER	Plans to hire Coordinator of Assessment.

ware Productivity Consortium, the U.S. Geological Survey and Wolf Trap Farm Park for the Performing Arts.

EXTENT OF THE INSTITUTION'S MIX OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE

George Mason University is pursuing four complementary paths: the creation of a strong and vital undergraduate program to ensure the full development of its students; anticipation of the needs of the future through an emphasis on high technology; exposition of the public policy implications of new societal directions; and pro-

motion of the cultural needs of the region through an emphasis on the performing arts and the humanities.

The University views research as an integral part of the educational enterprise involving both students and faculty. To encourage research, the George Mason Institute has been established to work in partnership with private industry and other appropriate public and private organizations for mutual benefit in the application and advancement of science and computer technology. To support research of public policy issues, the University has established the

Public Management Institute, and the Center for Government, Society and the Arts and has acquired the prestigious economics research group, the Center for Study of Public Choice.

The University is a partner in the development of the cultural and intellectual life of the surrounding community. During 1986-87, there were more than 28,000 participants in the workshops, conferences and short courses organized by the Division of Continuing Education. The University also offers a wide variety of plays, orchestral and dance concerts, art exhibits and lectures for community enjoyment.

THE INSTITUTION'S FUTURE DIRECTIONS

Rooted in the past, but understanding the needs of the region and future development of the Commonwealth, George Mason University is poised to meet the challenges of the coming decade. It is exploring new approaches to a variety of needs: a new curriculum for undergraduate education; new advanced degrees supportive of the Information Age; new openings on the cutting edge of telecommunications; new arrangements between the corporate world and higher education; and new cooperative arrangements with other areas of state government.

Looking toward the 21st century, the university now offers a doctoral program in information technology. This is supported by six master's degrees in fields dealing directly with the technological challenges of the future. A comprehensive internal assessment has sharpened the focuses of the University and enabled it to emerge stronger and richer in talent. George Mason University has set its goals and is preparing to meet the challenges not only of the 1990s, but of the new century to follow.

James Madison University

Harrisonburg

HISTORY AND DEVELOPMENT OF THE INSTITUTION

James Madison University was founded in 1908 by the Virginia General Assembly as the State Normal and Industrial School for Women at Harrisonburg. At that time, four years of high school work as well as two years of post-high school work were offered. The institution was renamed the State Normal School for Women at Harrisonburg in 1914. In 1924, when the General Assembly designated the four state normal schools as teachers colleges, the institution became known as the State Teachers College at Harrisonburg.

Authorization to award the baccalaureate degree was granted in 1916. High school courses were deleted in 1920-21, and the curriculum was broadened over the next decade to include a wide range of courses in the liberal arts. With the advent of an expanded curriculum, the General Assembly in 1938 renamed the institution Madison College in honor of President James Madison. Authorization to award the master's degree was granted in 1954. In 1966, by legislative action, Madison College became fully coeducational. Continued growth and changes at the institution resulted in the achievement of university status during the 1977 General Assembly, when the school became James Madison University.

JMU is a coeducational, regional university of more than 10,000 on-campus students, nearly 80 percent of whom are from Virginia. In order to gain admission, students must be both academically prepared and potentially able to contribute to the diversity of the University community. As a predominantly undergraduate institution, the curriculum offers a strong program of general studies which prepares a stu-

JMU Assessment Plan	
GENERAL EDUCATION	ACT-COMP and ETS-AP being used with samples and analyzed longitudinally. Redefining the goals and objectives of liberal studies. May design own instrument.
MAJORS	Nine programs have defined their goals and objectives and chosen instruments. All programs will do the same by 1988.
ALUMNI FOLLOW UP	Surveys sent to sample of graduates Part I - generic for alumni. Part II - major-specific and analyzed by departments. Results will be reported to Initiatives Steering Committee.
REMEDATION	Profile of potential high-risk students will be constructed. Locally designed mathematics placement exam to be given summer 1988. Remediation provided by local community college.
SUCCESS OF REMEDIATION	N/A
TIMETABLE FOR IMPLEMENTATION	Some activities already under way. Students will be assessed at entrance, end of sophomore and senior years.
PROCEDURES EVALUATION	Internal and external evaluation by Academic Council, Advisory Committee to Office of Student Assessment, and consultant. Reliability and validity studies will be conducted.
DEVELOPMENT PROGRAMS	Results to be presented to Initiatives Committee and reviewed by appropriate administrators.
OTHER	Has developed assessment model with seven dimensions, including affective development. Office of Student Assessment formed.

dent for majoring in the standard fields of the humanities, sciences, education, nursing, and business, as well as for careers in the arts, communication, and the media. Academic programs are offered in the College of Letters and Sciences, the College of Business, the College of Education and Human Services, the College of Nursing, and the College of Fine Arts and Communication. The Graduate School administers

all graduate programs at the University. The University offers the master's degree in a number of academic and professional fields, and the Education Specialist degree in school psychology.

PURPOSE OF THE INSTITUTION

James Madison University is a liberal arts university with an additional commitment to



professional and pre-professional programs. The University's major emphasis is at the undergraduate level; however, the graduate program is also strong. Graduate programs are proposed when the programs can provide an effective service to the community or when particularly excellent undergraduate programs can be extended into a position of regional and national recognition. As a regional university, James Madison attracts students from throughout the state, particularly the Shenandoah Valley, and the urban areas of Northern Virginia, Tidewater, Richmond, and Roanoke.

The student body at James Madison University is heterogeneous; the University makes a

conscious effort to attract a diverse student body on the premise that a student's total education is greatly enhanced by exposure to people from many different backgrounds.

The University is primarily a residential campus, with the majority of its undergraduates living in University housing. A wide range of social, extracurricular, and dormitory programs are available to students to augment classroom instruction, resulting in total education for the student.

The University is dedicated to the belief that an enduring and meaningful educational experience must be based on exploration of one's cultural heritage and contemporary life through general studies in the liberal arts and sciences. The University is also committed to the preparation of its students for success in a chosen occupation or profession. The University has a special commitment to preparing its students for rapid changes in society.

EXTENT OF THE INSTITUTION'S MIX OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE

The University's major commitment is to superlative teaching. It recognizes that a sound educational effort emphasizes a spirit of honest inquiry, both in the classroom and elsewhere.

The importance of research and public service, however, is also recognized. All types of research are encouraged on the James Madison University campus, although the University normally concentrates on research which shows promise of immediate and direct benefit to student learning. The University is engaged in a variety of public service activities benefiting professional groups and industrial, commercial, and educational communities, as well as

cultural programs which benefit the general community.

James Madison offers 71 academic programs at the undergraduate level, 31 at the master's level, and the Education Specialist in school psychology. Approximately \$500,000 in grants are received annually to support research in the areas of the arts, natural sciences, social sciences, business and education.

THE INSTITUTION'S FUTURE DIRECTIONS

The future of the academic program at James Madison University will be dictated by the needs of society. Continuing efforts will be made to anticipate the particular areas of expertise that will be in demand in the future, and the University's curriculum will be adjusted accordingly.

The University intends to use its traditional strength to meet the needs of the future. Future needs will be met, in large part, not by seeking out new directions in subject matter but by adjusting existing subject areas in different ways to support societal and student needs.

Emphasis on the improvement of institutional programs will continue, as will attention to research and public service—particularly as those activities affect the teaching mission. In the interest of public service, James Madison University recognizes the growing educational needs of the adult population. Existing programs will be expanded as necessary to support those needs. The University expects to be comprehensive at the bachelor's and master's levels in all areas where it has traditionally shown strength with respect to contributing to the higher educational objectives of the Commonwealth.

Longwood College

Farmville

HISTORY AND DEVELOPMENT OF THE INSTITUTION

Longwood College originated from the Farmville Female Seminary Association, which was incorporated by the General Assembly in 1839. The College acquired its present name in 1949, after having been known as the State Normal School (1884-1914), the State Normal School for Women (1914-24), and the State Teachers College at Farmville (1924-49). Until 1949, Longwood was primarily a teacher-education institution for women. Concurrent with its last name change, Longwood began a diversification of program opportunities that has led to its current status as a comprehensive college for men and women with academic programs available at the bachelor's and master's levels. Today, Longwood College is a state-supported, co-educational, comprehensive college located in a rural setting. In Fall 1987 it had an off and on-campus enrollment of over 2,900 students. In addition, the College has over 3,500 non-credit enrollments and nearly 1,200 summer term enrollments for credit. Of the students enrolled in the fall semester, about 92 percent are in-state and 90 percent are residential. The distribution of students by sex is 67 percent female, and by race, 11 percent minority.

Approximately 25 percent of the students graduating from Longwood College earn certification to teach. The remaining students are enrolled in the other primary programmatic areas of liberal arts, business administration, social work, therapeutic recreation and pre-professional studies. The College is organized academically into three schools and 12 departments. At the master's level, the College offers advanced work in education (Master of Science) and English (Master of Arts). There are six undergraduate



degrees: Bachelor of Arts, Bachelor of Science, Bachelor of Science in Business Administration, Bachelor of Science in Business Education, Bachelor of Fine Arts and Bachelor of Music Education. There are 30 major programs at the bachelor's level.

In addition to its self-contained programs, Longwood has developed a number of cooperative programs with other in and out-of-state institutions. In most cases Longwood does not serve as the degree-granting institution but prepares the student for specialized study at the co-

operating institution. In addition, a cooperative program with Hampden-Sydney College allows students from either college to take classes at the other. Longwood cooperates with a large number of public and private institutions within the state in programs that provide intern opportunities for students in education, business administration, government, social work and therapeutic recreation.

In the last two years, Longwood has substantially revised its transfer policy to attract students from two-year colleges and to simplify

LC Assessment Plan	
GENERAL EDUCATION	Has 4 student goals related to general education, which are under revision. Will use ETS Academic Profile and student involvement measures.
MAJORS	Teacher Education and School of Business have begun assessing majors. Teacher Education uses graduate follow-up, student teaching centers and mentor program. Business Education will do pre- and post-testing using ETS undergrad business test. Other majors will develop plans.
ALUMNI FOLLOW UP	Graduate survey will be college wide, with departmental questions and a check on satisfaction.
REMEDATION	Summer program for high-risk students identified by SAT, TSWE, high school GPA, and high school rank. Also identifies high-risk students during college by grades. Students are assigned to remedial English and math courses on the basis of test scores.
SUCCESS OF REMEDIATION	N/A
TIMETABLE FOR IMPLEMENTATION	Teacher education and business program evaluations under way. General education study under way. Other disciplines will begin evaluation by 1990.
PROCEDURES EVALUATION	Internal evaluation is planned.
DEVELOPMENT PROGRAMS	Will review and revise the curriculum and do faculty development on the basis of results.
OTHER	Emphasis on affective development. Uses Pace's College Student Experience measure and ETS data to measure outcomes over the 14 student goals.

the transfer process. Since the Spring of 1986, any student who has earned an Associate in Arts and Sciences degree (AAS&S)* in the Virginia Community College System and whose associate's degree represents a university parallel curriculum, is considered to have satisfied Longwood's General Education requirements.

In addition, Longwood has entered into direct articulation agreements with Southside Vir-

ginia Community College, Danville Community College, Central Virginia Community College, and Thomas Nelson Community College to provide benefits to students earning a university parallel degree. Those students will automatically be accepted at Longwood as juniors and can generally expect to graduate in two years.

Similar policies and agreements are also in effect with Richard Bland College and apply to

holders of any of the three associate degrees from Richard Bland.

*In practice this policy has applied also to holders of the AA or AS degrees from the VCCS.

PURPOSE OF THE INSTITUTION

The primary educational objective of Longwood College is to provide a curriculum distinguished by academic excellence. The College believes that this goal is best achieved by a close interrelationship between teaching excellence and scholarly activities. As an institution of higher education, the College is further dedicated to serving the citizens of Southside Virginia by providing enriched educational and cultural opportunities to the area.

The primary areas within the Commonwealth from which the institution attracts students are Richmond, Northern Virginia, Southside Virginia and Virginia Beach. Outside the state, students come primarily from New York, Maryland, New Jersey, Connecticut and Pennsylvania. Students from several foreign countries also attend Longwood.

As a member of the Central Virginia Consortium for Continuing Education, Longwood offers approximately 35 off-campus courses per year in the adjoining counties and in Lynchburg and South Boston. An estimated 450 students are attending these programs.

Longwood is one of the graduate comprehensive colleges in Virginia's diverse system of higher education and is the only small, primarily residential college located in a rural setting. Its central location in the state and its affiliation with a small town provide students with an opportunity to share in a unique educational experience. The proximity of three larger cities

also provides opportunities for urban, social and cultural life for the student body.

EXTENT OF THE INSTITUTION'S MIX OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE

The primary goal of Longwood College is to provide its students with instruction of high quality. The College also recognizes that quality instruction and professional activity are closely related. Therefore, the college encourages its faculty to participate in professional research. During the last year Longwood allocated approximately three quarters of a million dollars to research and sponsored programs.

The College serves Southside Virginia through its continuing education program, exhibits and performances in the College's facilities, community work by faculty, and by opening its athletic facilities to local recreation needs.

In addition Longwood assists in the economic development of Virginia through the Longwood Business Innovation Center. This center is recognized as a national model for small college innovation centers.

THE INSTITUTION'S FUTURE DIRECTIONS

Longwood expects a modest increase in enrollment through 1992. Including on and off-campus credit courses it is estimated that 3,000 students will be enrolled at Longwood by the end of the 1980s. In addition, non-credit and summer enrollments for credit are expected to rise.

The development of a wide variety of weekend, evening and summer offerings on campus is in progress. Elderhostels, alumni workshops, courses for employees of the region's industries

and many conferences and workshops will provide educational opportunities for senior citizens, graduates, potential undergraduates and intermittent attenders.

The number of minority students is expected to increase and the number of males is expected to approach half the population. The College intends to review its admission practices yearly and make such changes in standards as are appropriate.

Longwood's Education and Human Services Department has recently initiated a program leading to certification in special education. It also is examining several other programs, focusing on areas where Virginia's estimated demand considerably exceeds the estimated supply.

Computer literacy has expanded significantly during the 1980s. Use of computers as an integral part of instruction throughout the College will enhance each academic program. Such in-

struction not only enables the institution to make more efficient use of teaching time, but also provides an atmosphere of computer awareness for all students, which is essential for a broad-based understanding of the modern technological society.

Longwood College will renew efforts to establish cooperative programs with the public schools of the surrounding counties. Building upon its affiliation with the Southside Consortium for Special Education, Longwood plans to strengthen its offerings in special education to assist the counties of Amelia, Buckingham, Charlotte, Cumberland, Lunenburg, Nottoway, and Prince Edward in providing educational opportunities for children with exceptional learning conditions. Longwood is also working closely with a network of superintendents from the region's school systems to identify other needs and opportunities.



Mary Washington College

Fredericksburg

HISTORY AND DEVELOPMENT OF THE INSTITUTION

Mary Washington College was founded in 1908 as the State Normal and Industrial School for Women in Fredericksburg. In 1924 it became Fredericksburg State Teachers College. In the thirties the curriculum was diversified to cover the liberal arts and sciences, and in 1938, taking the name of one of Fredericksburg's prominent early residents, the College became Mary Washington College. Formal affiliation with the University of Virginia came in 1944, when

Mary Washington College became the undergraduate women's liberal arts college of the University. In 1970 coeducation came both to Charlottesville and to Fredericksburg, and in 1972 the General Assembly made Mary Washington College a fully independent institution under its own Board of Visitors.

Beginning as a teachers college for women, the College has evolved into a selective public liberal arts college for men and women. It remains relatively small, with a total enrollment

of about 3,350 students, predominantly undergraduate and residential. Although the College enrolls a national and international student body, over 75 percent of the resident undergraduates are Virginians.

Located in the rapidly growing urban corridor midway between Washington, D.C., and Richmond, the College in recent years has added academic programs designed to meet the continuing education needs of residents in the region. Approximately 500 of the College's 3,350 students are part-time commuting adults whose needs are met increasingly through use of the College's resources in the evenings and on weekends, and by cooperative arrangements with nearby campuses of the Virginia Community College System.

The College is organized into academic departments of one or more disciplines and offers 35 undergraduate programs in the liberal arts and sciences and compatible professional fields leading to the degrees of Bachelor of Arts, Bachelor of Science, Bachelor of Science in Medical Technology and Bachelor of Liberal Studies. It also offers a master's degree program in business administration and an interdisciplinary graduate degree, the Master of Arts in Liberal Studies.

PURPOSE OF THE INSTITUTION

Mary Washington has historically focused on the liberal arts and sciences, with the pursuit of academic excellence as the core of a value system emphasized throughout the College. This commitment to excellence and liberal learning will continue in the years ahead.

Believing that a broad liberal education based upon freedom of inquiry, personal respon-

MWC Assessment Plan	
GENERAL EDUCATION	Has already developed general education objectives. Will develop own instruments. Will begin in fall 1988 with pre-test/post-test design.
MAJORS	Each department has identified the method it expects to use with seniors. Includes GRE, portfolio reviews, exit interviews, national tests and departmentally prepared tests. 4-6 majors per year through 1991.
ALUMNI FOLLOW UP	Will establish an Alumni Assessment Committee to pull together what is already being done and to design a new follow-up procedure. Will be ready for implementation in 1992.
REMEDIATION	No high-risk students admitted. Can identify at-risk students after 1st semester. Will conduct study to see if can identify at-risk students earlier.
SUCCESS OF REMEDIATION	N/A
TIMETABLE FOR IMPLEMENTATION	See each category.
PROCEDURES EVALUATION	To be reviewed in fall 1989, coordinated by the College Outcomes Assessment Committee.
DEVELOPMENT PROGRAMS	None
OTHER	Hired new Associate Dean for Assessment. Will develop an outcomes database.



sibility and intellectual integrity is the best preparation for citizenship and career, the College requires its undergraduates to pursue balanced and coherent studies in the arts, the humanities, and the natural and social sciences as a necessary accompaniment to their concentration in a particular field.

As a small, predominantly residential undergraduate institution of the liberal arts and sciences, Mary Washington is distinctive within the Virginia system of higher education by providing a small college alternative to qualified students.

Mary Washington is sensitive to the educational needs of the citizens within its commut-

ing region and has established undergraduate and graduate degree programs designed especially for adult part-time students. The College will continue to assess its full-time and part-time offerings and, when needed, will propose curriculum changes to fulfill its continuing education commitment to the area's population.

EXTENT OF THE INSTITUTION'S MIX OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE

Consistent with its purpose and mission, the College places its greatest emphasis upon providing instruction of the highest quality. The goal of that instruction is to offer students learning opportunities that will provide them with a

sound general education, sensitize them to their responsibilities as citizens in the broader community, offer them the means to achieve the highest possible degree of self-realization, and enable them to develop the skills and abilities necessary for life-long learning and productive and creative lives.

The College encourages its faculty to pursue the individual scholarship and departmental research necessary to support the instructional mission and the undergraduate and graduate academic programs of the institution.

Mary Washington's public and community service activities provide citizens with on and off-campus continuing educational opportunities and assist in meeting special community needs. The College's "Center for Historic Preservation," designed to support the undergraduate degree program in historic preservation and to provide specialized services to preservation-related organizations and interested individuals, is unique within Virginia and the region.

THE INSTITUTION'S FUTURE DIRECTIONS

In the decade to come, as the College evaluates its offerings, it will seek opportunities to strengthen further its high quality programs in the liberal arts and sciences. Appropriate curricular adjustments will be proposed. Substantial changes in the size or scope of the curriculum are unlikely, as are changes in the fundamental character of the College or its mission. Mary Washington College will continue to emphasize residential undergraduate liberal education and will also offer, within the liberal arts context, a limited number of compatible undergraduate and master's level programs designed primarily for commuting students.

Norfolk State University

Norfolk

HISTORY AND DEVELOPMENT OF THE INSTITUTION

In response to a growing demand for higher education in the Tidewater region, Virginia Union University established a Norfolk unit in 1935. Following a rapid expansion of this unit's responsibilities, Virginia Union University relinquished control in 1942 to the newly-chartered Norfolk Polytechnic College. The Commonwealth's interest in the fledgling school began in 1944 when the General Assembly adopted legislation merging it with what was then the Commonwealth's single traditionally black state-supported institution, Virginia State College. Nurtured by this new partnership, the two-year division of Virginia State flourished for more than two decades, expanding enrollment and curricula. It received permission to offer the bachelor's degree in 1956. A gift of 50 acres of land from the City of Norfolk gave the Norfolk Division of Virginia State College adequate space to accommodate its burgeoning enrollment and diverse academic programs.

The Virginia General Assembly established an autonomously operated Norfolk State College in 1969. In recognition of the college's broadening mission, Norfolk State became a university in 1979.

Norfolk State University is a coeducational urban institution offering courses of study in the liberal arts and sciences, technology, nursing, and other fields leading to professional degrees at the associate, bachelor's, and master's levels. Enrollment at the University is approximately 7,700. Virginia residents comprise 75 percent of that number. Nearly 65 percent of the students are life-long residents of Tidewater, while the remaining 35 percent come from elsewhere in Virginia, the United States, and 34 foreign

NSU Assessment Plan	
GENERAL EDUCATION	Beginning in fall 1988, all freshmen will complete a general education questionnaire. Follow-up sample surveys will be taken of students completing 75 semester hours.
MAJORS	Plans to develop procedures to assess majors through pre- and post-tests.
ALUMNI FOLLOW UP	Administered first survey in spring 1987. Survey developed using Title III Funds in consultation with NCHEMS.
REMEDATION	Established on-going process. Students with low high-school GPAs and low scores on the university's placement tests in English, math and/or reading are remediated.
SUCCESS OF REMEDIATION	Will compare scores of remediated students on standardized exams to non-remediated students. Will also compare graduation rates, academic standings and performance.
TIMETABLE FOR IMPLEMENTATION	6-year on-going plan. Some activities are already in process.
PROCEDURES EVALUATION	Timetable to evaluate various components of plan with use of consultants.
DEVELOPMENT PROGRAMS	Programs to be developed based on evaluation of test results.
OTHER	Considering the use of Rotter's Internal-External Focus of Control and Survey of Study Habits and Attitudes in identifying high-risk students.

countries and territories. The student body ratio of men to women is approximately 5 to 6.

The University offers a broad range of academic disciplines including business, education, social work, mass communications, and the natural and physical sciences, which have strong student appeal. The academic programs are offered through nine schools and 32 departments.

At the bachelor's level, program emphases lie in the sciences, allied health professions, urban planning, business, technology and educa-

tion. At the master's level, the institution continues to develop its human resources program, including urban affairs, gerontology, communication, special education, community psychology, fine arts and business. Future plans call for proposing further development of programs in these fields.

In order to enhance access to upper level degree programs, Norfolk State University has entered into extensive, formal student transfer agreements with more than a dozen community



colleges in Tidewater and beyond. Transfer agreements also have been developed with Old Dominion University, Virginia Polytechnic Institute, and State University and Christopher Newport College. The most extensive credit exchange arrangement exists with Old Dominion University, featuring an innovative program of inter-campus registration and matriculation. Moreover, the University is a partner in a doctoral program in clinical psychology with the Eastern Virginia Medical School, the College of William and Mary and Old Dominion University.

PURPOSE OF THE INSTITUTION

Through the years, Norfolk State University has enlarged its historical purpose of extending services to black Virginians to encompass all citizens in the larger community. The University will continue to identify, encourage and cultivate the nontraditional student seeking development of his or her full academic potential. The University strives to maintain high academic standards while developing alternative models for higher education.

The University offers programs unique to Virginia. It is home to the nation's largest female Reserve Officer Training Corps unit. The men's ROTC contingent is, likewise, the largest of any non-military school in the state. Additionally, the University is a partner in the tripartite Hampton Roads Naval ROTC program with Hampton University and Old Dominion University.

The Dozoretz National Institute for Minorities in Applied Science is a program established by Norfolk State University to provide the best possible education in the sciences for highly

qualified and motivated students. The objective of the Institute is to address the severe shortage of minority scientists by producing graduates who are capable of entering and successfully completing graduate studies in the fields of Biology, Chemistry, Computer Science, Electronics Engineering, Mathematics, and Physics.

Although the University's primary service area is the Tidewater region, its mission extends throughout the Commonwealth and the nation. Numerous courses and special programs are made available to distant students through the activities of the School of General and Continuing Education. Offering a wide selection of education programs, this school serves individuals and organizations in need of supplemental course work on a credit or audit basis. A highly flexible curriculum offered through the Department of Adult Education and Public Service, as well as the popular Evening College division, accommodates the schedules of working professionals.

EXTENT OF THE INSTITUTION'S MIX OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE

Consistent with its mission, Norfolk State University places a high priority on classroom instruction, offering in-service training opportunities and convening national conferences on teaching dynamics and teacher training. While instruction will continue to receive ample attention, faculty research is no less an important endeavor. The research activity is expected to expand with a growing emphasis on graduate education. With some 71 academic programs available (seven associate, 49 baccalaureate, and 15 master's degree curricula), a diversity of state-funded and sponsored research in biomed-



cine, social and political behavior, mathematics, atomic energy, environmental sciences, and family studies is currently under way. The institution's total funded research has an approximate annual value of \$2.5 million.

Public service has always been central to the mission and philosophy of the University. The public service thrust is embraced by all academic and administrative areas and manifested through numerous special and ongoing activities. Some examples include the University's special laboratory programs for elementary, secondary and adult students whose basic skills competencies need strengthening. Instructional activities are provided in the areas of reading, language arts, computer science, mathematics and speech. The University maintains formal relationships with area public school systems which regularly refer their advanced high school students to the institution for more intense study. Elementary and secondary classes make frequent field trips to campus to study astronomy in the University's planetarium. Moreover, special children's reading programs, sports activities, and child diagnostic clinics are available to local residents throughout the year. After diagnosing a child as gifted, the University

offers a special laboratory to stimulate the child's interest. This facility is staffed by professionals and students in the University's master's program for gifted education.

A number of Norfolk State's outreach and continuing education programs are brought together in the Brambleton Multipurpose Center. In a contract with the city of Norfolk, the University has assumed the operation of the Center and is administering several programs that are beneficial to the citizens of the surrounding area. Notable among these are a teenage anti-pregnancy program, social service assistance programs, a gerontology program, and community recreational programs.

THE INSTITUTION'S FUTURE DIRECTIONS

Norfolk State University's direction in the coming years will be characterized by a heightened attention to research and community service in an urban environment. Both academic programming and student enrollment will expand moderately over the next five years before leveling off for the decade of the 1990s. Graduate education programs will comprise much of that growth, bringing a commensurate increase in the amount of research conducted by faculty and students.

Outreach programs to extend the University's traditional faculty and program strengths further into the community will occupy a high priority for future growth. Included among these outreach efforts are in-service education for public school teachers and administrators, special programs to improve middle and high school guidance counseling, expanded continuing education programs and technical assistance to area small businesses.

Old Dominion University

Norfolk

HISTORY AND DEVELOPMENT OF THE INSTITUTION

Born in tradition yet building toward the future, Old Dominion University had its formal beginning in 1930. It began as the Norfolk Division of the College of William and Mary, although William and Mary had offered extension courses in Norfolk as early as 1919. Virginia Polytechnic Institute began offering an engineering program under a cooperative agreement with the Norfolk Division in 1931. The Norfolk Division was authorized to offer baccalaureate programs in 1954. In 1962, the General Assembly made the Norfolk Division independent of the College of William and Mary. Shortly thereafter the new Board of Visitors adopted the name of Old Dominion College. In September 1969, the College became Old Dominion University.

Today the University has an on-campus student body of over 14,600 composed of an equal number of males and females. Sixty-nine percent are full-time students. Seventy-nine percent are Virginia residents.

Six academic colleges, Arts and Letters, Business and Public Administration, Education, Engineering and Technology, Health Sciences, and Sciences provide students with a wide array of undergraduate degree programs and course options. Master's degree programs are offered in the arts, humanities, social sciences, business administration, accounting, economics, education, engineering, computer science, public administration, urban studies and the allied health professions. Certificates of Advanced Study are offered in two areas of education. Doctoral programs are offered in selected areas: biomedical sciences, engineering, ecological sciences, computational and applied mathematics,

ODU Assessment Plan	
GENERAL EDUCATION	Beginning fall 1988 ACT/COMP, Jonathan Warren Tests of Quantitative Reasoning and Watson-Glaser Critical Thinking Appraisal.
MAJORS	1987-1988 will be used as a planning year for assessment in the majors.
ALUMNI FOLLOW UP	In 1988, alumni who have graduated 3, 10, and 20 years ago will be surveyed. Alumni survey will be annual.
REMEDIATION	Established on-going process. All freshmen are required to take placement test in reading, writing, and math. All below cut-off scores are remediated.
SUCCESS OF REMEDIATION	Gathers comparative data of developmental and non-developmental student's GPA's and attrition rates.
TIMETABLE FOR IMPLEMENTATION	Many activities in progress. Timetable covers activities over next 6 academic years.
PROCEDURES EVALUATION	Use of external consultants.
DEVELOPMENT PROGRAMS	Faculty will receive assistance on techniques and tools of assessment, and mechanisms for using assessment results. Programs to address problems and deficiencies will be planned.
OTHER	C.E.S.Q. will be administered in fall 1988 to second-semester freshmen and seniors.

oceanography, applied physics, clinical psychology, industrial/organizational psychology and urban services with components of urban management and urban education with additional programs planned and approved in business administration and computer science. To take advantage of the extensive educational resources available in eastern Virginia, the University has joint and cooperative programming arrangements with Norfolk State University, the Medical College of Hampton Roads, (formerly the Eastern Virginia Medical Authority), the College of William and Mary, Christopher Newport

College, Tidewater Community College, and Hampton University.

The University has also established the Peninsula Graduate Engineering Center in Hampton. This is the first of several planned graduate centers in the Hampton Roads area. These centers are designed to provide advanced educational research services to the region. In particular, the Peninsula Center provides support for the engineering and industrial community on the Virginia peninsula. The University has developed a comprehensive set of student services to support and extend the learning environment

beyond the classroom. These student services are designed to respond efficiently to student needs; to provide outlets for leisure and recreational interests; and to support students in need of counseling, advising, academic skill development, and career planning and placement.

PURPOSE OF THE INSTITUTION

The primary mission of Old Dominion is to meet the educational, professional and research needs of eastern Virginia and the Commonwealth. At the undergraduate level it emphasizes a comprehensive program of liberal arts, sciences and selected professional programs. Graduate offerings address the region's needs for advanced professional education and for certain specialized programs. Old Dominion's seven areas of specialization, designed to respond to the needs of the region, are administration, applied science and technology, the development of urban educators, fine and performing arts, health-related studies, international studies, and marine and environmental studies.

While basic or pure research is encouraged, emphasis is given to applied research due to the integral role the University plays in the economic, social and cultural life of the region.

Old Dominion University has a broad program of continuing education. It is committed to extending its professional services throughout the Commonwealth with special emphasis on eastern Virginia. The University offers undergraduate and graduate courses at many off-campus sites and provides a wide variety of non-credit courses, seminars and short courses annually for over 24,000 individuals interested in personal enrichment and career development. The University has developed an extensive ca-





pability in the application of telecommunications instruction. Each year Old Dominion hosts several teleconferences that are both regional and national; participates in a statewide graduate television engineering network; and offers instruction via television to students located on the Eastern shore, the Virginia peninsula, and at other sites throughout the Hampton Roads area.

The University has a selective admissions policy but seeks to admit all applicants who can demonstrate the probability that they can succeed at the University and complete their degree requirements. The composition of the student body reflects a diverse constituency with regard to age, sex, racial, socioeconomic and geographic backgrounds. This diversity en-

hances the University's programs and multicultural atmosphere.

EXTENT OF THE INSTITUTION'S MIX OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE

Old Dominion University values the importance of excellence in teaching, research and public services.

The commitment of the University to the region it serves affects the nature of research and related forms of scholarly endeavor undertaken by its faculty. Through contracts with NASA's Langley Research Center, faculty and students are engaged in work involving civil, electrical and mechanical engineering, chemistry, biology, physics, and geophysics. Faculty

are also engaged in research and scholarship in oceanography, education, business, health, humanities, and social and behavioral sciences. In 1986-87, a total of \$10.1 million in public and private research funds was obtained.

The University meets its public service responsibilities through a wide variety of cultural, recreational and educational programs. It sponsors community ballet; theatrical, musical and athletic performances; lectures; and scholarly symposia. It provides workshops, conferences and in-service programs for health and mental health workers, educators, business persons, public officials, social service workers and other groups.

THE INSTITUTION'S FUTURE DIRECTIONS

As Old Dominion builds toward the future it continues to develop its mission by strengthening its academic programs at the undergraduate and graduate levels in the seven areas of specialization. Particular emphasis is placed on the unique needs of eastern Virginia. The University's research continues to expand and address issues related to the urban environment, economic development, engineering, marine science, business, and in the applied social, behavioral, biological and physical sciences.

Public service is receiving increased emphasis through programs offered both on and off-campus. This mission is exemplified by Old Dominion's leadership role in international trade and economic development in the Virginia Center for World Trade. To enhance the quality and scope of higher education services, Old Dominion University continues to reinforce its cooperative relationships and joint programmatic efforts with other institutions of higher education.

Radford University

Radford

HISTORY AND DEVELOPMENT OF THE INSTITUTION

Radford University was established by the General Assembly in 1910 as the State Normal and Industrial School for Women at Radford, and has been in continuous session since its formal opening in 1913. The school became Radford State Teachers College in 1924 and was authorized to award the Bachelor of Arts degree in 1935. In 1944 the College was consolidated with Virginia Polytechnic Institute as its Women's Division and renamed Radford College. The General Assembly severed the institution's formal affiliation with Virginia Tech in 1964. At that time an autonomous Board of Visitors was established for Radford College, and the College was authorized to grant the Master of Science degree. In 1972, after almost 60 years as a college for women, Radford became coeducational, and in 1979 the institution was granted university status by the General Assembly.

Today Radford University is a coeducational, comprehensive, residential undergraduate institution with selected graduate programs. Since 1972 the total enrollment has increased by more than 108 percent. During the Fall of 1987, enrollment reached 7,854 in both on- and off-campus programs. Radford's students come from all over the Commonwealth: 31 percent from Western Virginia, 30 percent from Northern Virginia, 12 percent from the Tidewater area, and 19 percent from Richmond and Central Virginia. More than 8 percent come from other states and countries. While serving as a residential campus (over 3,700 students live on campus), the University also attracts local students who live within commuting distance of the campus.

Radford maintains strong programs in liberal arts, the fine arts, teacher education, business

RDU Assessment Plan	
GENERAL EDUCATION	ETS-AP Considering use of ACT/COMP to test a sample of students. Using supporting data from GRE and general knowledge portion of NTE for augmentation.
MAJORS	An assessment task force appointed in each department (1987-88) to refine departmental plans. Present assessment efforts include departmentally-designed test; internships; senior papers/projects; NTE and GRE, portfolio reviews, alumni job placement. Other planned assessment efforts: longitudinal studies, employer questionnaires, alumni surveys.
ALUMNI FOLLOW UP	Current Annual survey of previous year's graduates. Annual follow-up by several departmental chairpersons.
REMEDICATION	High-risk students admitted contingent on placement testing, enrollment in developmental courses as needed, academic advising. Standardized tests for basic skills under investigation. Options to pursue: 1) Developmental course(s) at community college before fall term or during fall 2) Summer transition program. Enrollment in all college credit courses only after successful completion of developmental course(s).
SUCCESS OF REMEDIATION	Will track remediated students.
TIMETABLE FOR IMPLEMENTATION	Clearly outlined for 4 areas from 1987-92: high risk, general education, majors, alumni. Departments divided in 4 groups; each to complete cycle of plan implementation and evaluation by end of 1991-92 AY.
PROCEDURES EVALUATION	Annual external evaluation. Other evaluation procedures in each subsection (high risk, general education, majors, alumni).
DEVELOPMENT PROGRAMS	Results of general education assessment may be used to develop desired teaching skills. Results of remedial program will be used in designing of intervention programs. Results of alumni follow-ups used at discretion of deans and department chairpersons to address program deficiencies and related issues.
OTHER	Director of Student Assessment Programs appointed. Roles outlined for Directors of Academic Advising Services, Admission, Career Planning and Placement, Counseling, Residential Life, Institutional Research, and Alumni Affairs; Registrar's Office; Dean of Students; Statistical Consulting Services; Deans of Colleges; and Department Chairpersons.

and other professional fields. Presently the institution offers, in a medium-sized university environment, 78 undergraduate degree programs (including professional and pre-professional) in the Colleges of Arts and Sciences, Business and Economics, Education and Human Development, Visual and Performing Arts, and Nursing and Health Services. The Graduate College offers 31 degree programs at the master's level and the Educational Specialist degree in school psychology. The graduate program provides advanced

and specialized courses of study, supervised practicum experiences and opportunities for research.

PURPOSE OF THE INSTITUTION

As a part of Virginia's diversified system of higher education, Radford University fulfills the role of a medium-sized comprehensive university serving the entire Commonwealth. The pervasive commitments of the institution are to

teaching and student learning; to the widespread participation of the faculty, students, and staff in the affairs of the institution; and to a demonstrated willingness to change. As the institution's mission statement notes, "Through a sound and comprehensive general education and carefully tailored major program options, students at Radford are challenged—intellectually, culturally, socially and personally. Within this context, they can develop into mature, responsible, well-educated citizens."



EXTENT OF THE INSTITUTION'S MIX OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE

As a public university, Radford assumes a responsibility to address societal issues and needs through scholarship, research and creative activity. Because it is a student-oriented institution, Radford has set as its first priority a commitment to successful teaching. This commitment notwithstanding, research and professional activities are encouraged, and all faculty are expected to make "professional contributions" to the institution and to their respective disciplines. Radford's position is that research and teaching are not mutually exclusive activities and that research can and should be a vital part of the teaching transaction.

The University, with its primary emphasis on teaching, also attempts to serve the public needs of western Virginia with a wide range of academic, cultural and human service programs. Off-campus courses and programs are offered throughout the Western Region Consortium area, including an evening college in Roanoke. The University responds to the special continuing education needs of school systems, businesses, industries and individuals in both the urban and rural areas of western Virginia. Radford is committed to meeting the educational needs of fully-employed residents of the western region for high-demand programs by providing evening courses both on-campus and at off-campus locations.

THE INSTITUTION'S FUTURE DIRECTIONS

Within the Virginia system of higher education, Radford University will continue to be a comprehensive institution of medium size with a primary focus on effective teaching.



Richard Bland College of the College of William and Mary Petersburg

HISTORY AND DEVELOPMENT OF THE INSTITUTION

Founded by an Act of the General Assembly in 1960, Richard Bland College was established as a branch of the College of William and Mary in Virginia to provide opportunities for higher education to the citizens of Southside Virginia. The College opened to students at its permanent location in Petersburg in September 1961.

Richard Bland College today is a two-year, state-supported college. It continues to be governed directly by the Board of Visitors of The College of William and Mary. Approximately 900 on and off-campus undergraduate students are enrolled, with about 97 percent being Virginia residents. About 70 percent of the institution's students are enrolled in programs in the arts and sciences, with the remainder in business. All students receive a firm grounding in liberal studies.

The College consists of the Divisions of Humanities and Social Sciences, Natural Sciences and Mathematics, and Business and Physical Education. The Associate in Arts, Associate in Science, and Associate in Science in Business degrees are offered.

PURPOSE OF THE INSTITUTION

Richard Bland College, the branch college of The College of William and Mary in Virginia, offers transfer associate degree programs in liberal arts and sciences, business, and other career programs appropriate to a junior college. The College also recognizes its responsibility and role in community education, public service and community cultural activities.



Although semi-professional skills are developed in appropriate programs, the College's curricular emphasis is on general education courses offered during the first two years of a baccalaureate degree program. Developmental programs are provided for students who need to improve skills necessary for success in college.

Summer programs in basketball, football, soccer, computing and foreign languages are offered for elementary and secondary students in the area. The College is also actively engaged in programs associated with gifted children and accelerated high school students.

Richard Bland believes that its uniqueness in the state system of higher education lies in its continuing concentration on the preparation of its students for transfer to senior institutions, particularly those institutions with whom it has signed articulation agreements. The College of William and Mary has a special transfer relationship with Richard Bland.

EXTENT OF THE INSTITUTION'S MIX OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE

As would be expected in a primarily liberal arts junior college, the major focus of the institution is instruction. Research activities are generally limited to efforts by individual faculty members to strengthen their academic specialties. Public service is offered through the College's speakers bureau and through consulting activities of the faculty and staff with area agencies, institutions and service organizations.

THE INSTITUTION'S FUTURE DIRECTIONS

Richard Bland College intends to remain relatively stable in its enrollment and will continue to offer transfer associate degree programs

in liberal arts, business administration and career programs appropriate for a junior college. Such programs might include associate degree programs in some areas of the performing arts and allied health professions.

During the next ten years, the College will attempt to serve more students beyond the 18-25 age range, as well as more part-time students. The institution might also propose a two-year residential program for students from throughout Virginia who prefer the learning environment that a small liberal arts junior college can provide.



RBC Assessment Plan

GENERAL EDUCATION	ACT-COMP and locally developed exams. Pre-and post-testing planned (entrance and exit). Yearly analysis of GPA, percent of students failing courses.
MAJORS	Will tie it to alumni follow-up. Transfer information from senior institutions.
ALUMNI FOLLOW UP	Survey form done for SACS visit - will be done every 3 years.
REMEDATION	Placement tests in English and math (locally developed tests and ETS English and reading test). Developmental reading and math courses. Has tracked remedial students.
SUCCESS OF REMEDIATION	Students who take developmental courses pass freshman English and math at a slightly higher rate than others.
TIMETABLE FOR IMPLEMENTATION	Alumni survey under way. ACT-COMP test under way. Curricular changes to be done annually.
PROCEDURES EVALUATION	Steering Committee and administration will evaluate progress.
DEVELOPMENT PROGRAMS	Faculty workshops to use COMP for curriculum revisions.
OTHER	Articulation agreements with senior institutions. User-satisfaction surveys.

University of Virginia

Charlottesville

HISTORY AND DEVELOPMENT OF THE INSTITUTION

The University of Virginia, founded by Thomas Jefferson in 1819, is a major comprehensive state university of national character and stature. It was established following enactment of a statute by the General Assembly in 1819 providing that "There shall be established, in some convenient and proper part of the State, the University of Virginia, wherein all the branches of useful science shall be taught." The University is a coeducational institution with most of its students enrolled full-time and a large number living on grounds. The Fall 1987 enrollment of the University was 21,268.

The University is comprised of the College of Arts and Sciences and the Schools of Architecture, Commerce, Education, Engineering and Applied Science, Graduate Arts and Sciences, Graduate Business Administration, Law, Medicine, and Nursing. The Division of Continuing Education provides courses for part-time students at numerous off-campus locations throughout the state. Clinch Valley College of the University of Virginia is located in Wise. The University of Virginia Medical Center, which offers students in the health sciences a wide variety of settings in which to learn, also provides health care through its hospitals and clinics.

The University offers undergraduate programs leading to degrees in architecture, architectural history, arts and sciences, commerce, education, engineering and applied science, nursing, and planning. At the first professional and graduate levels, the University offers programs leading to degrees in accounting, arts and sciences, architecture, architectural history, business administration, education, engineering and applied science, landscape architecture, law,

medicine, nursing and planning. Today the University confers a considerable portion of the doctoral degrees awarded by Virginia's institutions of higher learning.

PURPOSE OF THE INSTITUTION

A university is a community of scholars having as its central purpose the enrichment of the human mind. This central purpose is served, at the University, by activities designed to quicken, discipline, and enlarge the intellectual and creative capacities, as well as the aesthetic

awareness, of its members. In addition, the institution is committed to recording, preserving, and disseminating the results of its intellectual inquiry and creative endeavors. The University seeks to achieve its purpose through the pursuit of specific goals, including educating men and women in undergraduate schools and programs, graduate schools, and graduate professional programs; providing an atmosphere conducive to participation in the affairs of the University and of the community at large, and by expanding opportunities for persons with special challenges; leading in the advancement and application of



knowledge through graduate study and research, including research in the medical sciences; providing innovative leadership in health care and medical services in the local community, the Commonwealth, and the nation; contributing to education in the Commonwealth and beyond by offering a variety of continuing education opportunities, as well as by assisting other colleges and educational institutions by making available to them the facilities of the University and the experience and counsel of its members; offering to the Commonwealth of Virginia and the nation the various kinds of public

service and intellectual and cultural activities which are consonant with the University's purpose; and establishing appropriate new programs, schools and degrees.

EXTENT OF THE INSTITUTION'S MIX OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE

The University of Virginia places equal emphasis on the programs of instruction and research. Both of these programs are essential in a comprehensive doctoral-degree granting institution.

The University carries out research activities, most of which are federally and privately funded, in a wide variety of disciplines. Its annual expenditure for research and for the support of graduate students engaged in research is approximately \$67.9 million; this amount has been increasing at the rate of about 10 percent per year, for the last two years.

The University's public service activities are carried out principally through its institutes and research bureaus and through programs offered statewide by its Division of Continuing Education. Furthermore, the University of Virginia Medical Center provides patient education and quality health care at primary, secondary and tertiary levels to citizens throughout the Commonwealth and in neighboring states.

THE INSTITUTION'S FUTURE DIRECTIONS

The University of Virginia, after several years of steady state enrollment in the early 1980s, has approved plans to increase the number of students on-grounds from approximately 17,400 to 17,800 by 1990. It is proceeding with plans to enhance its quality and increase its effectiveness in the coming decade through such mechanisms as a University-wide evaluation of undergraduate academic programs and student assessment, cooperative efforts with the state's other comprehensive doctoral institutions to offer high-quality, off-grounds degree programs utilizing the latest technology, and enhanced research initiatives in cooperation with state business and industry. Funded research should continue to grow at a rate of about 10 percent in the next year and succeeding years. The service role of the University Medical Center will continue to expand, particularly in the area of tertiary care.

UVA Assessment Plan	
GENERAL EDUCATION	Will conduct a longitudinal study of sample of students. May include portfolio review. Exit interview expanded.
MAJORS	Will ask departments to require senior projects. Departmental evaluation phased in 1988-93.
ALUMNI FOLLOW UP	Interviews of a sample of alumni will be conducted.
REMEDATION	Transition Program and Summer Transition Program for high-risk students. Writing Center for referred students.
SUCCESS OF REMEDIATION	Will develop.
TIMETABLE FOR IMPLEMENTATION	See individual sections.
PROCEDURES EVALUATION	Steering Committee will evaluate.
DEVELOPMENT PROGRAMS	Deans and Faculty Senate will use longitudinal data. Results will shape strategic planning.
OTHER	Standing committee will oversee plan.

Virginia Commonwealth University

Richmond

HISTORY AND DEVELOPMENT OF THE INSTITUTION

Virginia Commonwealth University was created by the General Assembly on July 1, 1968, by merging the Medical College of Virginia (founded in 1838) and Richmond Professional Institute (founded in 1917). This merger was proposed by the Wayne Commission in response to a perceived need in Virginia for an urban university located in Richmond. Building rapidly on its strengths, the University has developed as a comprehensive doctoral-granting, research



university with a dual campus. Its location in the capital city has provided a real-life laboratory for teaching, research, and public service, the scope of which is local, regional, national, and even international in its impact.

The present 19,379 on-campus students, 92.2 percent of whom are Virginians, are a blend of full and part-time residents and commuters with an average age of 26. The academic disciplines are organized into the College of Humanities and Sciences and 12 schools: Allied Health Professions, the Arts, Basic Sciences, Business, Community and Public Affairs, Dentistry, Education, Medicine, Nursing, Pharmacy, Social Work and Graduate Studies.

Research and service to society are considered essential elements of the institution's educational mission. The baccalaureate, master's, doctoral, and first professional degree offerings are structured to serve the needs of today's society. Joint instructional programs are offered with the University of Richmond, the University of Virginia, Virginia Polytechnic Institute and State University, Old Dominion University, and Virginia State University.

PURPOSE OF THE INSTITUTION

Virginia Commonwealth University is committed to two primary objectives. The first is to provide society with educated professional practitioners who have the capacity to deal with the specialized problems of their discipline and who possess the attributes of broadly educated persons. A parallel objective is to provide advanced study for practicing professionals and broad educational opportunities for the adult part-time student. These objectives necessitate depth and quality in the participating disciplines and

strong support from the fundamental disciplines of the arts and sciences.

The institution's primary service area is Virginia, with most of its students coming from central Virginia. A number of disciplines, however, have a national and international student market and reputation. Continuing education is conducted as an extension of the primary functions of instruction and research. The objective is to establish the means by which the University can make its skills, knowledge, and talents useful in addressing the problems that face large population centers. From medicine to accounting to art, the appeal of the University to its students is centered in its broad span of disciplines. This appeal is enriched by 40 educational programs that are unique in the Commonwealth.

EXTENT OF THE INSTITUTION'S MIX OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE

The University offers a balanced commitment to each of the three functions of instruction, research and public service. It is this balanced commitment that enables the University to disseminate to society the results of its scientific, cultural and professional inquiries. Research is defined as an inseparable component of the teaching-learning process. VCU ranks 64th in the nation in federally funded research and development; 36th in medical science research; and 65th in life sciences research. In research productivity VCU ranks second in the state. In 1987, sponsored programs totaled over \$46 million. Patient care, a mandatory segment of the teaching-learning process, is provided as a service role model for comprehensive health care at the Medical College of Virginia campus, which



is the fourth largest health sciences complex in the nation. Similarly, other institutional service functions seek to identify and evaluate societal needs and to provide the appropriate response to satisfy these needs.

THE INSTITUTION'S FUTURE DIRECTIONS

Virginia Commonwealth University's future is directly related to the evolving needs of its service area and the attractiveness of its program offerings. Future modifications in program emphasis must accommodate the needs of the society of which it is a part. The concept of instruction, research and public service as interdependent components of a total system is crucial if the University is to provide the leadership to address critical societal problems. In response to society's needs, the University expects to enhance its research and graduate programs, broaden the opportunities for the adult learner, and strengthen the relevancy and quality of its undergraduate and professional curricula.

VCU Assessment Plan	
GENERAL EDUCATION	Builds on Varities Project. 8 goals identified for general education. Has pilot projects in assessing writing and math. Will use national instruments such as CLEP, ACT-COMP, and ETS Academic Profile, as well as locally developed exams.
MAJORS	Will measure majors in conceptual, technical and integrative competence; career marketability; and general education outcomes. Will compare majors in professional fields with those in humanities and sciences. Will build assessment into courses in major and senior year requirements (e.g. capstone courses/projects) and will use licensing/certificate exam results.
ALUMNI FOLLOW UP	Now done through departments. Developing VCU-wide form with input from departments.
REMEDATION	Placement tests in math, chemistry, foreign language, reading, writing, SAT or ACT for students under age 22. Special admissions requirements for several programs. Transition point assessment with requirements for certain grades, and specific exams. Remedial programs available.
SUCCESS OF REMEDIATION	Will track success of remediated students.
TIMETABLE FOR IMPLEMENTATION	Have initiated pilot projects in general-education assessment.
PROCEDURES EVALUATION	Internal and external evaluation is planned.
DEVELOPMENT PROGRAMS	Will establish retention/attrition cohort file to get data for curriculum and faculty development.
OTHER	None

Virginia Community College System

HISTORY AND DEVELOPMENT OF THE SYSTEM

The impetus for the establishment of the statewide system of community colleges in Virginia was a desire on the part of the Commonwealth to expand the educational opportunities available for citizens beyond high school. In the early 1960s, educational opportunities within the state were limited, because higher education programs were not available in some regions. In addition, the state was unable to meet the de-

mand of new industries for skilled workers. The General Assembly, aware of these needs, established the Commission on Vocational and Technical Education in 1962. In 1964 the State Board of Technical Education and the Department of Technical Education was established to administer vocational and technical schools. Also in 1964, the Assembly appointed the Virginia Higher Education Study Commission with a mandate to examine the possible establish-

ment of community colleges to fill a gap in Virginia's system of higher education.

In 1966, legislation created a Department of Community Colleges and a State Board for Community Colleges. The legislation provided for the creation and maintenance of a statewide system of comprehensive community colleges—the Virginia Community College System—with the State Board for Community Colleges responsible for the establishment and administration of all the community colleges within the system. In addition, local Community College Boards were established to act in an advisory capacity to the State Board. Several technical schools and university branches which existed in 1966, along with the addition of a number of new colleges, form the System which now exists. Each of the 23 community colleges located throughout Virginia serves a designated geographic region.

In 1977, the General Assembly passed a resolution changing the role of the State Board for Community Colleges from a board of a state agency to a governing board of a statewide institution of higher education.

The mission of the Virginia Community College System is to assure, as part of the statewide education community, that all individuals who can benefit through the development and extension of their skills and knowledge will be able to do so. To accomplish this mission, the VCCS provides quality programs and services that are financially and geographically accessible.

The 23 individual colleges are comprehensive, offering freshman and sophomore courses in the arts and sciences which may be acceptable for transfer to baccalaureate degree programs; diversified technical curricula including

VCCS Assessment Plan	
GENERAL EDUCATION	Goals and objectives need to be defined. Council staff asked the VCCS to work with colleges in determining how best to assess general education outcomes for all program students.
MAJORS	All expect to assess AAS program completers by program, generally using locally developed tests or licensing examinations.
ALUMNI FOLLOW UP	Most already conduct annual follow-up surveys, especially for o/t students. Council staff requested that surveys be more generic and be sent to o/t and transfer program students.
REMEDICATION	Placement tests in reading, writing and mathematics generally required. Placement in remedial courses, based on test results generally only recommended.
SUCCESS OF REMEDIATION	Several plans to study retention and academic performance of remediated students.
TIMETABLE FOR IMPLEMENTATION	Most colleges tie assessment timetable into larger program review cycle.
PROCEDURES EVALUATION	Several will incorporate it into the on-going program evaluation process. Others will issue annual report.
DEVELOPMENT PROGRAMS	Some say results will be reported to the college curriculum committee, institutional research office, or to individual faculty.
OTHER	Most already do or plan to survey local employees, certificate, diploma and continuing education students.



programs leading to the associate degree; occupational and technical education leading directly to employment; and courses in general and continuing education for adults. The principal emphasis of the System is occupational-technical education. Transfer, developmental, continuing education, and community service programs are integral parts of the mission.

These programs are supported by student development services. In addition, the VCCS responds to community needs by providing trained

individuals for industry, business, professions, government and other educational institutions.

In the Fall 1987 quarter, the VCCS enrolled 123,086 students.

Seventy-three percent of the community college students in Fall 1987 were enrolled part-time. In Fall 1987, 42 percent of the students attending community colleges were under 25 years old, 31 percent were between 25 and 34 years old, 18 percent were between 35 and 44, and ten percent were above age 45. About 58 percent of the students were female, and 12 percent of the students were black. Many students attend community colleges to prepare for entry into baccalaureate degree programs or to seek job training. Increasing numbers of students enroll initially as non-curricular students. Their goals are varied, but the majority attend community colleges to upgrade skills for a present job, to develop skills for a new job, or to explore careers; many also attend for general knowledge, as well as cultural and personal enrichment.

Transfer agreements with four-year institutions promote the successful transfer of students from the two-year colleges.

PURPOSE OF THE SYSTEM

The purpose of the Virginia Community College System is to provide all citizens in the Commonwealth access to post-secondary educational opportunities within commuting distance of their home or work and at a cost most can afford. The modified open-door admissions policy ensures that all citizens who can benefit from programs and services provided by the colleges will have the opportunity to do so.

Each community college participates, along with the senior colleges and universities, in one

of six regional continuing education consortia. The consortia are committed to providing continuing education opportunities and public service activities which meet the needs and interests of citizens in each region of the Commonwealth.

The continuing education and community service programs offered by the community colleges are varied. The continuing education programs include credit offerings, located in both on and off-campus facilities, which may be used for general educational improvement and which may meet the needs of such specific career groups as legal secretaries or bank employees. The off-campus courses enable the college to extend educational opportunities to local communities. Non-credit courses and seminars, which are self-supporting, provide learning experiences which are not available in traditional credit programs. College facilities and personnel are available to citizens of the service region for special events. In addition, community service programs are offered by the colleges throughout the year. These programs are intended to provide educational and cultural opportunities for area residents. Art exhibits, lectures, workshops, conferences, festivals and fairs are examples of the numerous community service programs offered at community colleges.

EXTENT OF THE SYSTEM'S MIX OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE

Quality instruction at a reasonable cost and public service programs that meet the educational needs of the localities served are emphasized over research at community colleges. Eight programs which lead to Associate in Arts, Associate in Science, or Associate in Arts and Sci-



ences degrees are offered as college transfer programs. Approximately 225 occupational-technical programs lead to the Associate in Applied Science degree or to certificates and diplomas. The occupational-technical programs include the following major curricular areas: agri-

cultural and natural resource technology, arts and design technology, business technology, engineering/industrial technology, health technology, and public service technology.

Community service programs are specifically designed to meet the educational and cultural needs of the local community. Basic emergency

medical technician courses, real estate examinations, seminars for women, health fairs, energy conservation seminars, English as a second language, and communication with the deaf are examples of only a few of the various community service programs offered statewide by the community colleges.

THE SYSTEM'S FUTURE DIRECTIONS

The growth and development of the Community College System since its inception in 1966 has enabled Virginia to make great strides toward increasing access to educational opportunities for citizens throughout the state. At the same time, the System has served the economic development of the state by training or retraining students who aid the state's economy by taking or returning to jobs in their local communities.

The Virginia Community College System will continue, within the scope of its mission, to provide access to citizens throughout Virginia to the educational opportunities that best meet their needs. The System expects to continue serving a diverse student body and expects that the enrollment of adults, women, and minorities will increase.

Programs and services will vary to meet the different educational needs of students attending community colleges. To keep abreast of the statewide workforce needs of business, industry, government, and the professions, colleges will continue to modify, add, or delete the occupational-technical programs now offered. The demand for instruction at locations throughout the service regions of the colleges will increase and community colleges will strive to make more effective use of community resources.

Virginia Military Institute

Lexington

HISTORY AND DEVELOPMENT OF THE INSTITUTION

The Virginia Military Institute was founded in 1839 as the nation's first state military college. It is now the last classic military college in the nation.

VMI cadets constitute a military corps, with the Governor as commander-in-chief. VMI offers a unique learning environment, the product of more than 145 years of educating citizen-soldiers, young men prepared for leadership roles in society and for military leadership in time of national need.

VMI is a fully accredited, state-supported four-year undergraduate military college for men. Approximately 55 percent of the cadets are residents of the Commonwealth, and all Virginia applicants who are academically and physically qualified are accepted for admission.

Academic majors at VMI lead to a Bachelor of Arts or Bachelor of Science degree in the general fields of engineering, liberal arts, and science. In addition, all cadets must complete Reserve Officers Training Corps programs established and maintained by the U.S. Department of Defense. Successful completion of the programs earns graduates armed forces commissions which must be accepted with an obligation for various combinations of active and reserve duty.

PURPOSE OF THE INSTITUTION

The primary purpose of Virginia Military Institute is the thorough education of young men within a framework of military discipline. It is a purpose unchanged from that set by the founders, who said: "The military feature, though essential to its discipline, is not primary in the Institute's scheme of education."

VMI Assessment Plan

GENERAL EDUCATION	Using ETS-AP with incoming "rats" (freshmen), sophomores, seniors. After constructing expectancy tables, will give ETS-AP to rising third classmen and graduating first classmen.
MAJORS	Engineering: Engineering-in-Training (EIT) exam. Sciences: Chemistry Dept. pilot (1987-88): American Chemical Society examination for all science majors, ACS advanced exam series for chemistry majors. Liberal Arts: Prototype (1987-88) Dept. of Modern Languages. Modern Language Association college placement test, ETS Multiple Assessment Program tests, and in-house comprehensive exams.
ALUMNI FOLLOW UP	Pilot project (1987-88): ETS's Alumni Survey of the Self-Assessment Program Samples - classes 1963, 1968, 1978, 1983. Plans to design in-house measures. Yearly assessments planned of classes 10, 20, 25 years out.
REMEDIATION	Placement tests in mathematics language: CR/IC test (Mathematics Association of America) if SAT score less than 600. Modern Language Association Placement Test - 2 or more years of high school language. Optional programs: Summer tutorial program and Minority Student Transition Program.
SUCCESS OF REMEDIATION	No method indicated; 80% retention rate cited. Future measurement efforts focused on retention rates among subgroups of corps.
TIMETABLE FOR IMPLEMENTATION	Entire program to be functional by 1988-90. Results of all existing assessments to be included in first biennial report (1990).
PROCEDURES EVALUATION	None
DEVELOPMENT PROGRAMS	Faculty and curricular development programs. New Cadet Advising Program for those in academic distress (below 2.0 GPA) and curricular counseling for those not in academic distress.
OTHER	Assessing physical development: Physical Fitness Test (PFT). Impact of Cadet Life: CSEQ with appended institutional questions (pilot: 1987-88). Structured exit interviews - starting Spring 1988. Project Office for Student Assessment.

In essence, VMI's purpose is to combine the academic work of a full college curriculum and the regimen of military discipline. The military atmosphere contributes to the Institute's philosophy of a broad and sound education and teaches self-reliance and self-discipline.

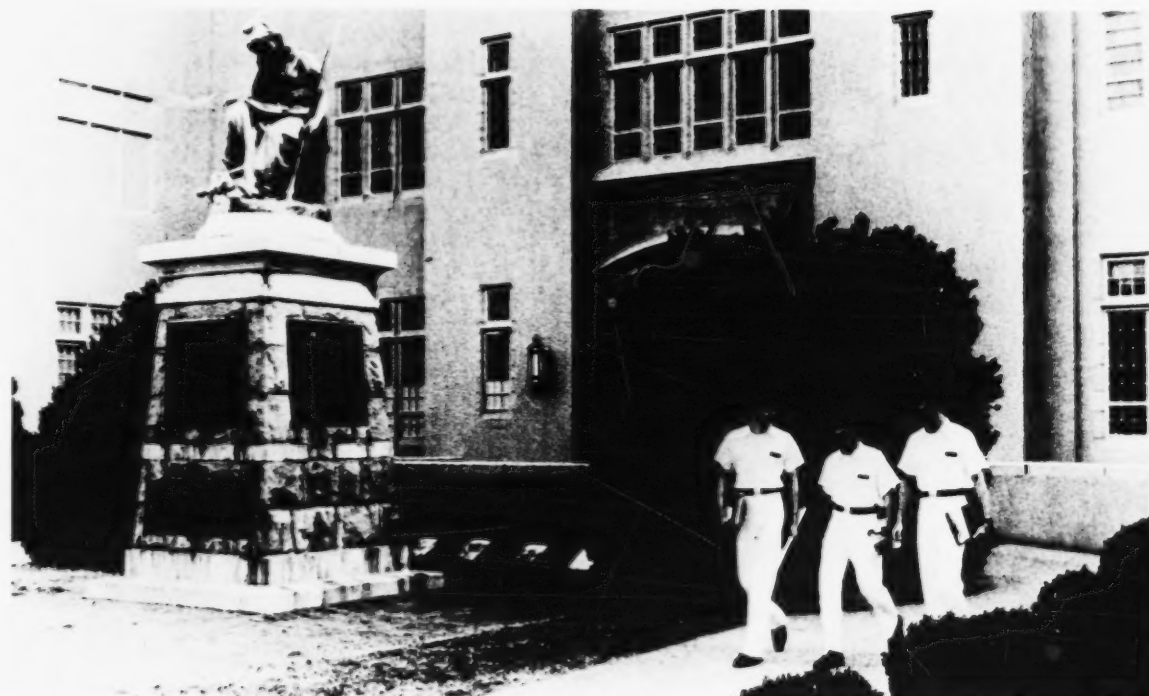
In order to emphasize the whole person, extracurricular activities are stressed. Programs ensure physical well-being for those not engaged in intercollegiate athletics, and club activities are limited only by the imagination and interests of the cadets.

Virginia Military Institute encourages applications from qualified male Virginia high school graduates as well as from young men throughout the other 49 states and the U.S. territories. Qualified foreign male students are accepted.

EXTENT OF THE INSTITUTION'S MIX OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE

VMI gives academic instruction at the undergraduate level in 12 degree programs in economics, English, history, modern languages, mathematics, biology, chemistry, computer science, physics, civil engineering, electrical engineering and mechanical engineering. All cadets must choose an officer training program associated with the Army, Navy, Marine Corps, or Air Force ROTC. Successful completion of the VMI program enables graduates to enter many civilian professions, or the armed forces, or to continue their education at graduate, medical and other professional schools.

The VMI Research Laboratories is the research arm of VMI for administering grants and contracts. The Laboratories' annual research volume exceeds \$175,000; about one-fifth of the



faculty plus a number of cadets are involved in studies sponsored by state, federal and private grants.

As part of its public service commitment, VMI provides many academic, athletic, recreational, and physical training programs and facilities to the community. Through its continuing education program, all who are qualified are offered the opportunity to take courses for credit in the Summer Session and in the Evening College. Non-credit short-term courses and seminars are held annually for specific interest groups. Numerous cultural programs give support to VMI's academic efforts and, because they

are open to the public, add substantially to the Institute's community service. Faculty and staff members serve on many state boards, community boards and committees.

THE INSTITUTION'S FUTURE DIRECTIONS

Believing that the uniqueness of the Virginia Military Institute lies, in part, in the close relationship between instructor and cadet, VMI limits its enrollment. There are no plans to enlarge the Corps to such an extent as to impair the effectiveness of the VMI academic and training programs.

Virginia Polytechnic Institute and State University

Blacksburg

HISTORY AND DEVELOPMENT OF THE INSTITUTION

Virginia Tech, as the Commonwealth's land-grant university is known popularly, was founded in 1872 under the provisions of the federal government's Morrill Act. The historic legislation authorized endowment funds from the sale of public lands for the support of a college in each state to teach agriculture and mechanical sciences, as well as other "liberal and practical education" related to "the liberal and practical education of the industrial class in the several pursuits and professions of life." From such a beginning, Virginia Tech has developed into the largest comprehensive, research-oriented university in the state.

Located on a plateau between the Blue Ridge and Allegheny Mountains in Southwest Virginia, the Tech campus is part of the town of Blacksburg, about forty miles southwest of Roanoke.

Virginia Tech is committed to an effective program of undergraduate teaching, as well as advanced study and research. The university has seven undergraduate colleges in the following areas of discipline: agriculture and life sciences, architecture and urban studies, arts and sciences, business, education, engineering, and human resources. The colleges have graduate programs coordinated through the Graduate School. In addition, Tech offers the Doctor of Veterinary Medicine degree through its Virginia-Maryland Regional College of Veterinary Medicine, with a satellite campus located at the University of Maryland in College Park.

VPI Assessment Plan	
GENERAL EDUCATION	University-wide examination core system generating a specific examination by program of study (completion required during sophomore or junior year). Review and analysis of course offerings and enrollments. Survey of faculty and students regarding core offerings and their relevance.
MAJORS	Multiple strategies, including, among others, Senior exit survey/capstone courses Senior design, thesis/project Assessment of student progress/transition point advisement Employer surveys.
ALUMNI FOLLOW UP	Data collected on employment and country-wide acceptances to graduate and professional programs.
REMEDATION	Program for high-risk students (freshmen with SAT scores of 1000 or less and students with QCA of 1.5 or less): Summer: Transition Program Virginia Tech Academic Success Program (V-TSAP)-placement testing in reading and mathematics, advising and counseling, "learning to learn" class; tutoring programs for enrollees in introductory chemistry and Engineering Fundamentals.
SUCCESS OF REMEDIATION	Systematic evaluations of both intervention programs (longitudinal).
TIMETABLE FOR IMPLEMENTATION	Five-year cycle of implementation begins fall 1987. Refinement of senior and alumni surveys, 1987-88.
PROCEDURES EVALUATION	University Task Force, including representatives from departments with assessment efforts in 1987-88, will review problems and progress in implementation. Will use input from SACS visiting team (spring 1988) regarding criterion 3.1 to refine assessment plan.
DEVELOPMENT PROGRAMS	Departments will be provided with information for improving instruction in courses and programs offered.
OTHER	Lenning's Taxonomy of Outcomes to construct a matrix. Associate Provost for Student Systems developing database to construct student profiles. Recommended ACE/UCLA survey of seniors. Higher education interns and graduate assistants to be involved in development of assessment instruments. Directors of University Outcomes Assessment appointed.

In recent years, more than 16,000 high school students have applied annually to Virginia Tech for a freshman class of about 4,000. The 22,000 students enrolled at Tech (about 18,000 undergraduate and 4,000 graduate) make it the largest university in the Commonwealth. About 75 percent of the undergraduate enrollment is from Virginia, with the remainder representing all other states and more than 80 foreign countries.

Virginia Tech's research programs focus on the advancement of scientific knowledge and are supported by nearly \$75 million in state, federal, corporate and other external funds. The university also operates the Virginia Cooperative Extension Service, with offices in all counties and most cities of Virginia, providing information and assistance for Virginia citizens.

Recently, a National Science Foundation survey ranked the university among the top 50 in research expenditures. A 120-acre Corporate Research Center, located next to Tech's campus, is being developed to attract high-technology research from the private sector. A substantial percentage of Tech's research funding is from corporations and businesses, and the university ranks nationally among the top ten institutions in this category. Virginia Tech is also the home of two technology centers sponsored by the state's Center for Innovative Technology (CIT), one for power electronics and the other for fiber- and electro-optics.

Virginia Tech is widely recognized for its strengths in agriculture, engineering, business, and various fields of sciences; these are balanced with comprehensive instruction in non-scientific areas. Programs in theater arts management, hotel and restaurant management, and market-



ing education have been recognized for their exceptional quality by peer institutions and professional organizations. Programs in accounting, public administration, forestry, exercise science, and architecture also have high national ratings. The university offers a full range of degree programs in the liberal arts and sciences, and is the residence of the Audobon Quartet, internationally acclaimed for its performances and recordings of classical music for strings. Since the 1960s, Virginia Tech has evolved from a mostly male, military-oriented university that emphasized agriculture and engineering into a coeducational, academically diverse institution. Tech's enrollment has doubled over the past 20 years and currently stands at more than 22,000 students, about 9,000 of them women.

The university has three academic centers in northern Virginia: the Marion Dupont Scott Equine Medical Center in Leesburg, the Northern Virginia Graduate Center in Falls Church,

and the Washington-Alexandria Architecture Center in Alexandria.

PURPOSE OF THE INSTITUTION

The following statement, developed by the faculty and approved by the university's Board of Visitors, describes Virginia Tech's purpose and future direction:

Virginia Polytechnic Institute and State University, a publicly supported, comprehensive, land-grant university, serves the Commonwealth of Virginia, the nation, and the international community by generating and disseminating knowledge in the humanities, arts, social sciences, scientific/professional disciplines through instruction, research, and extension. The University instills within each member of the University community an appreciation of the values and obligations of productive citizenship and the responsibilities of leadership, while promoting personal and intellectual development. Its scholastic programs are accessible to all who demonstrate academic merit to gain entrance.

To achieve this mission as the University moves toward the year 2000, it will identify and build on strengths across the University, forge innovative and mutually productive relationships with industry and government, manage resources efficiently, and establish a clear identity as a forward-thinking, high-quality institution that systematically guides and evaluates its future.

EXTENT OF THE INSTITUTION'S MIX OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE

Virginia Tech is fully committed to the primary missions of instruction, research and pub-

lic service. About 65 percent of the University's budget is allocated for instruction, with the remainder evenly divided between research and public service.

THE INSTITUTION'S FUTURE DIRECTIONS

The university has anticipated the future with major emphasis on the application of high-technology to the learning process. Tech's college of engineering was among the first in the country to require its entering freshmen to own personal computers; the university's computer science department followed suit. Tech now has more than 10,000 personal computers in use by its student body, which also has access to a supercomputer on campus. The university has begun a \$16 million telecommunications project that will keep it in the forefront of that technology, providing satellite uplinks and data transmission capabilities for technology transfer and programs in continuing education.

As a comprehensive university, Virginia Tech seeks to achieve greater academic excellence in both the arts and sciences. A required core curriculum broadens student perspectives in a manner that will complement fields of more specialized studies. The university's Carol Newman Library supports educational programs with more than 1.5 million volumes; it also has one of the largest collections of microforms in the country, with about 3.6 million items. The library uses a computerized information retrieval system that was created at Virginia Tech and is now used by many other libraries and institutions around the world.

The university will continue its current admissions policy, which gives high priority to Virginians for its freshman and transfer quotas.



The university has programs to attract a high proportion of minority students. Extension and research offices will continue to be maintained as part of the university's academic mission. Off-campus programs will be offered where they are needed, in cooperation with localities, educational groups, and the State Council of Higher Education.

Virginia Tech's major objectives are realized in providing the Commonwealth with high-qual-

ity teaching, research and public service programs, as well as in enhancing the economic and cultural development of the state and nation. More attention is also being focused on the university's international programs as its educational mission becomes more global in its scope. Virginia Tech intends to remain a national leader in higher education, responding to new academic challenges in a creative and well-planned manner.

Virginia State University

Petersburg

HISTORY AND DEVELOPMENT OF THE INSTITUTION

Virginia State University was founded on March 6, 1882, as the Virginia Normal and Collegiate Institute. Delegate Alfred W. Harris, a black attorney who represented Dinwiddie County in the General Assembly, sponsored the legislation that created the coeducational institution. The Act of Incorporation stipulated, "that the Institute shall conduct a college, and such professional departments as deemed wise by the Board of Visitors; that the curriculum in the college department shall include the higher mathematics and classics; and the Institute shall organize a normal department not to exceed three years in length." The institution was originally intended to provide educational opportunities to black Virginians. Today, it provides equal opportunity to all races for study and employment.

On May 20, 1887, the General Assembly standardized the curricula of the normal and collegiate courses. On March 29, 1902, in an amendment to its 1887 action, the General Assembly eliminated the college department and changed the name of the institution from Virginia Normal and Collegiate Institute to Virginia Normal and Industrial Institute. From 1872 to 1920, Virginia supported two land-grant institutions of higher education—a state school, Virginia Polytechnic Institute, and a private school, Hampton Institute. In 1920, the land-grant role was transferred from Hampton Institute to Virginia Normal and Industrial Institute. The Board of Visitors restored the college department in 1922 and, by legislative enactment in 1930, had the name changed from Virginia Normal and Industrial Institute to Virginia State College for Negroes. The name of the

institution was changed in 1946 to Virginia State College; and to Virginia State University in 1979.

The University consists of seven schools: Agriculture and Applied Sciences, Business, Education, Humanities and Social Sciences, Natural Sciences, Continuing Education, and Graduate Studies. The institution currently offers 39 bachelor's degree programs, 19 master's degree programs, and the post-master's advanced certificate program. The University has agreements with J. Sargeant Reynolds and John

Tyler community colleges to transfer programs in engineering technology. It cooperates with Virginia Commonwealth University in health education and Master of Interdisciplinary Studies programs. It also cooperates with Old Dominion University in a five-year mathematics/engineering degree program.

The programs and services of the University are responsive to an open admissions policy, and the University has strategies which serve the needs of three distinct categories of students: (a) those who can move at an accelerated academic



pace, (b) those who will achieve maximum success if they move at a normal pace, and (c) those who will need to extend their college study owing to deficiencies in prior preparation.

PURPOSE OF THE INSTITUTION

The mission of Virginia State University, one of the state's two land-grant institutions, is to promote and sustain academic programs that integrate instruction, research and extension-public service in a design most responsive to the

needs and endeavors of individuals and groups within its scope of influence. The University serves those students who live on campus and those who commute. The primary service areas of the University are Southside and Central Virginia; however, students matriculate from throughout the state, other states, and approximately 20 foreign countries.

Extensive continuing educational activities are offered through an evening program, a weekend program, an off-campus program, summer sessions and non-traditional degree pro-

grams. Also, non-credit educational experiences are provided through conferences, workshops, short courses, seminars and special programs. The University has a commitment to extend its research, instructional and service resources to meet the educational needs of the broader community, to meet the personal growth needs of individuals, and to provide learning experiences for persons engaged in the professions, industry, business, and public agencies.

EXTENT OF THE INSTITUTION'S MIX OF INSTRUCTION, RESEARCH AND PUBLIC SERVICE

The primary emphasis at Virginia State University is on the function of instruction with the research and public-service activities receiving major commitments through the institution's land-grant relationships, the Division of Research and Development, and the School of Continuing Education.

The University engages in research and in the resolution of problems facing society. For these purposes, it annually obtains external funding exceeding \$4.7 million.

Virginia State University is a moderate-sized, comprehensive institution which fosters close educational relationships with its alumni, friends, faculty, staff and students. The University motivates students to pursue self-directed learning, offers traditional and non-traditional educational programs, helps residents acquire skills necessary to improve conditions in rural communities, and establishes and maintains relationships with lesser-developed countries. The University has highly developed initiatives that introduce students to the world of work through on-campus and off-campus employment in both the public and private sectors.

VSU Assessment Plan	
GENERAL EDUCATION	ACT-COMP pre- and post-test on entrance and in freshman year.
MAJORS	Business information Systems, Math, and Curriculum and Instruction have locally developed exams. Teacher education also has ACT-COMP (math) and NTE. Each requires graduate follow-up. All other majors to begin in 1990.
ALUMNI FOLLOW UP	Questionnaire to be developed.
REMIEDIATION	Placement tests in reading, writing, math and speech. Remedial English and math courses.
SUCCESS OF REMEDIATION	Not provided.
TIMETABLE FOR IMPLEMENTATION	Teacher education and business program evaluation to begin in 1988. Other areas to begin assessment in 1990.
PROCEDURES EVALUATION	Assessment Committee will conduct internal evaluation.
DEVELOPMENT PROGRAMS	Development Programs will use results in student advising, curriculum development and faculty development.
OTHER	None

THE INSTITUTION'S FUTURE DIRECTIONS

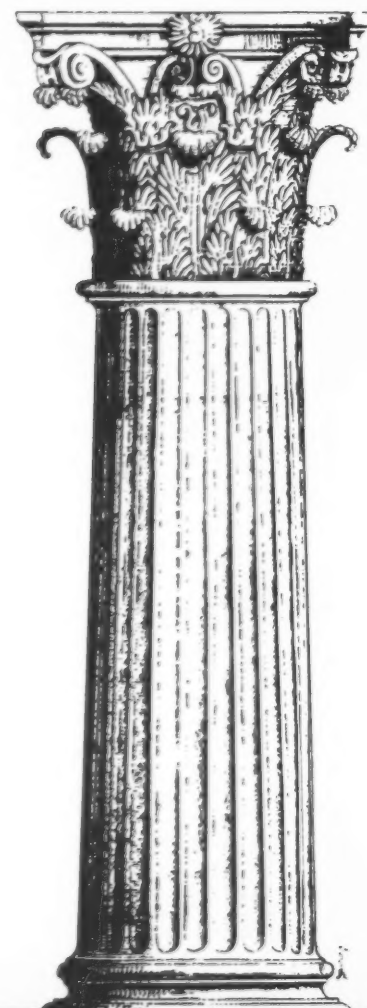
Virginia State University's future is inextricably associated with the educational, economic, cultural, and social development of Southside Virginia and the state, nation and world. The University will enter the decade of the 1990s with a focus on new and innovative degree programs in Hotel Restaurant Management, Food Marketing/Food Industry Management, Public Administration, International Studies, Computer Science, and Engineering Technology. The International Studies Program will augment traditional programs such as business, foreign languages and political science. The development of a postbaccalaureate degree in business administration will provide opportunities for graduates of baccalaureate programs to serve the business and professional communities. The University shall continue its strong traditional land-grant functions and programs in the liberal arts, sciences and education. It will likely propose offering doctoral-level programs which provide opportunities for additional preparation and licensure in the professions, business, industry, engineering technology, and human services.



Institutional Narratives- Independent Institutions

The Council of Higher Education has had a cooperative, productive relationship with Virginia's independent colleges and universities for the last 14 years. Among its duties, the Council administers a tuition aid program to reduce the tuition gap between public and independent colleges; the program helps provide Virginia students greater freedom of choice in selecting an institution. The Council also has a Private College Advisory Committee as one of its standing committees. The 1975 General Assembly enacted legislation establishing the Committee. The General Assembly also mandated the Council to provide advisory services to private institutions.

The Council's interaction with the independent colleges and universities will become increasingly important in the years ahead. As enrollments cease to increase rapidly and resources become more limited, it will be apparent that what happens in one segment of higher education ultimately affects the other segments. The Council believes that this will increase the interdependence of the colleges and universities within the state's total system of higher education.



Averett College

Danville

Chartered in 1859, Averett is a coeducational college of arts and sciences affiliated with the Baptist General Association of Virginia. The institution received its first accreditation as a junior college in 1917 and undertook a major reorganization in 1968 when it added a four-year baccalaureate degree program and became coeducational. Its first baccalaureate degrees were awarded in the spring of 1971. Graduate-level offerings were begun in 1978, with courses leading to the Master of Education degree in the areas of early childhood education, middle grades education, and reading education. Courses for a Master of Business Administration degree were begun in 1983, and the first of these degrees were awarded in the spring of 1986.

The curricular philosophy of Averett College has emphasized the blending of the liberal arts with career preparation. At the baccalaureate level, in addition to traditional majors in the arts and sciences, education, business and social work, unique programs in the curriculum include the business administration/aviation major, majors in equestrian studies, and a baccalaureate completion program for registered nurses. As an option to traditional majors, students may design their own major or elect a liberal studies major.

While research and scholarly activities are encouraged, Averett selects faculty who place primary emphasis on teaching. Students are the beneficiaries of this emphasis as well as of the emphasis on keeping class sizes small for more individual attention.

Averett's academic programs serve the community. The college is the only senior college in its south-central Virginia region; it has provided courses for degree-seeking students in Martins-



ville, South Boston, and Eden, North Carolina, in addition to its Danville location, where about half of its students commute to classes. The college also provides numerous cultural events open to all residents of the area. A special outreach in Northern Virginia has provided a unique opportunity for Korean students to pursue degrees from Averett College.

For the next decade the primary academic development of the college will be in strengthening the existing programs. Attention will be given to improving coordination with community and junior colleges and to the exploration of cooperative ventures with other institutions in the state to meet special needs in the community. In

response to denominational requests, the College will explore ways to increase off-campus activity.

Averett will also concentrate on continuing to operate with financial stability, emphasizing further improvement of its endowment and asset-building funds.

Approximately 40 percent of the total enrollment of 973 (1986) students reside on campus and nearly 40 percent are male. Almost 80 percent of Averett's students come from Virginia. The student body is diverse, representing a broad socioeconomic and cultural base of students from many different states and foreign countries.

Bluefield College

Bluefield

Bluefield College, a private, coeducational four-year liberal arts college, is located in Bluefield, a city of 6,700 in southwestern Virginia. Founded in 1922, the College is supported by the Baptist churches of Virginia. Nevertheless, the College is composed of students from many denominations and faiths.

Hallmarks of Bluefield College are academic quality, individual faculty attention, a friend-

ly campus atmosphere, a Christ-centered student life, and an attractive Appalachian mountain campus.

Traditionally, the cost to attend Bluefield College has been one of the lowest among private colleges in Virginia. The tuition fee is one of the lowest of any liberal arts college in the southeast United States. Typically more than 90 percent of the freshman class receive financial

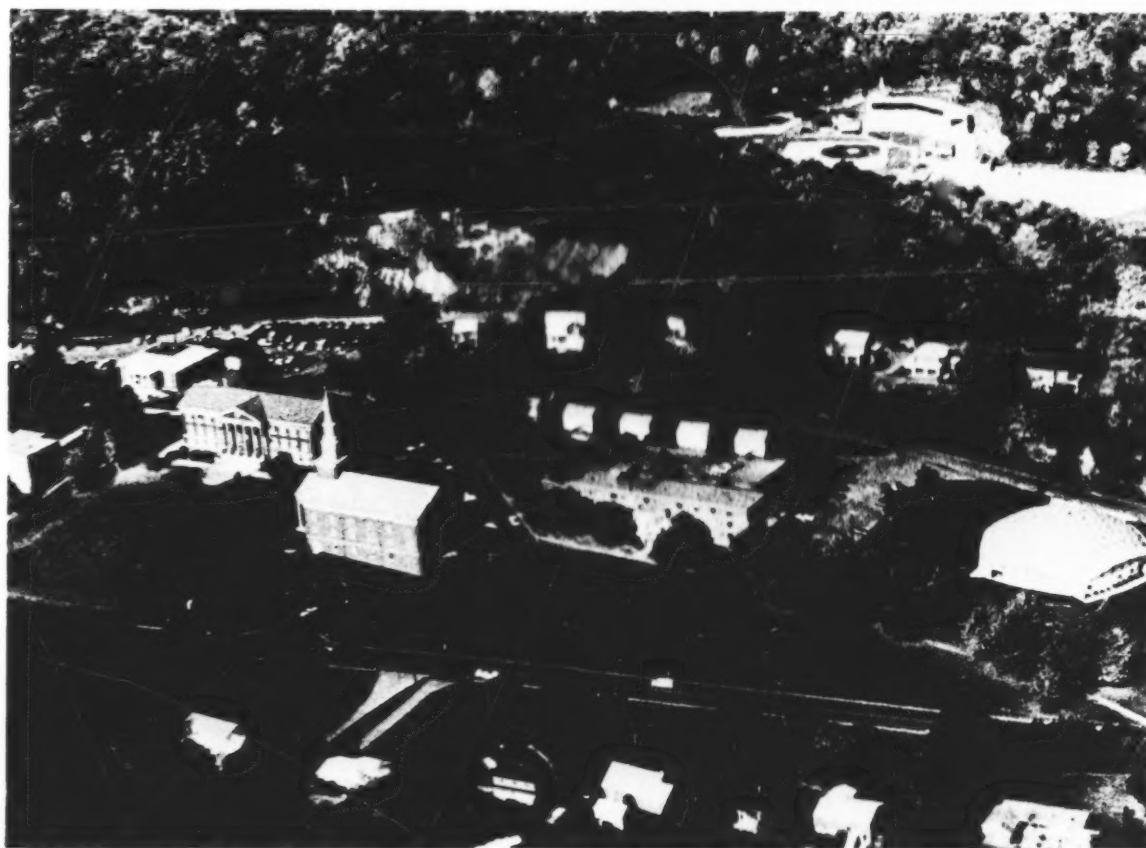
aid, averaging about \$1,000 a year.

Bluefield College offers numerous bachelor and associate degree programs and is accredited by the Southern Association of Colleges and Schools. Associate degree programs are offered in liberal arts, fine and applied arts, education, several medical specializations, and engineering. Bachelor degree programs are available in business, education, physical education, behavioral science, fine arts, biblical languages, English, history, interdisciplinary studies, psychology, religion and philosophy, biology, chemistry, general science, mathematics and social studies. Secondary education courses are offered in a number of areas for students seeking teacher certification.

With an enrollment of 400 students, professors know students by name. The single most important aspect of faculty-student life at Bluefield College is the dedication of the faculty to the success of the individual student. Average class sizes of between 10 and 30 students encourage interchange between professor and student.

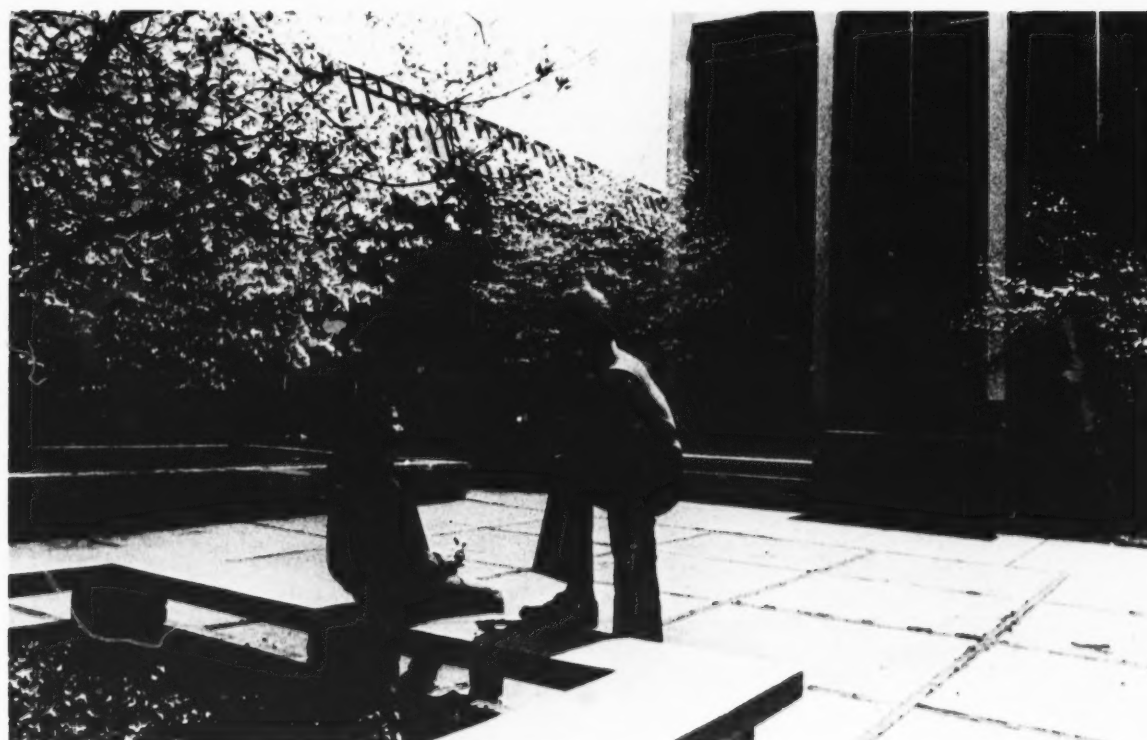
College facilities include 10 buildings on an 85-acre campus. The Easley Library contains over 55,000 volumes and receives over 150 periodicals. The computer laboratory provides a microcomputer for every 12 students. On-campus housing is available for all students, and 50 percent of the students stay in residence halls.

In athletics, Bluefield College is invariably a top-ranked member of the National Little College Athletic Association. The intercollegiate athletic program offers three sports for men and two for women. A comprehensive intramural sports program serves the entire student body.



Bridgewater College

Bridgewater



Bridgewater College, located in the Shenandoah Valley, is an independent liberal arts college with a long tradition of academic excellence. Founded by a leader in the Church of the Brethren, the college offers strong academic programs in 28 major fields. Today, Bridgewater College enrolls approximately 875 men and women representing many states and foreign countries. Bridgewater, Virginia's first senior coeducational liberal arts college, offers its students outstanding opportunities for a variety of educational experiences including study abroad opportunities, internships, and independent

studies.

The curriculum is divided into three major parts, each with its own requirements and objectives: general education, a field of concentration, and elective courses. The general education program is designed to ensure that each student acquires an understanding of people and their cultures as well as their social and natural environments. Fields of concentration provide depth and breadth of study in major areas. Elective studies increase skills and understandings in and beyond a student's major field, meet avocational interests, and fulfill requirements for

graduate and professional schools.

Experiential learning with a strong base in the liberal arts is a key to a Bridgewater education. An internship program encourages students to explore career options and to experience first hand the day-to-day realities of the work place.

A three-week interterm in late winter allows students to choose among a wide variety of learning experiences and to concentrate on subjects of particular interest. Dual-degree programs are offered in cooperation with Duke University in forestry and with Georgia Institute of Technology in engineering. Through reciprocity agreements among departments of education, students who complete Bridgewater's program in teacher education are eligible for certification in 28 states. Honors and independent study programs provide unlimited opportunities for students to range beyond the specified course curricula. Through the Brethren Colleges Abroad consortium, of which Bridgewater is a member, students may study their junior years at the University of Strasbourg in France, the Philipps University in West Germany, the University of Barcelona in Spain, the College of St. Paul and St. Mary of England, or the Dalian Institute of Foreign Languages in China.

Bridgewater college strives to promote broad intellectual experiences as well as proficiency in specific subject fields. A primary academic objective is a comprehensive appreciation of the humanities, the social sciences, and the natural sciences. Bridgewater endeavors to give its students strong bases from which to choose and prepare for specific careers and productive lives.

CBN University

Virginia Beach

CBN University, incorporated in 1977 as a non-profit educational corporation, is approved by the State Council of Higher Education for Virginia to award the Master's degree and to enroll students at the doctorate level. The University is accredited by the Southern Association of Colleges and Schools to award the Master's degree and is a candidate for accreditation to award the doctorate degree.

The CBN University campus includes 200 acres near the intersection of Interstate 64 and Indian River Road in Virginia Beach. It adjoins the International Communications Center of the Christian Broadcasting Network, founded in 1961 by Dr. M.G. (Pat) Robertson, who is also founder and chancellor of the University.

CBN University president Bob G. Slosser is a journalist, the author of several books, including **Reagan Inside Out**, and is the former Assistant National Editor of the **New York Times**. He explains that "the University's graduate-based program places primary emphasis on academic excellence and the application of biblical principles to all of life. The University concentrates on disciplines that play a dominant role in the world—those areas that significantly affect the way man thinks and thus conducts his affairs."

CBN University presently includes five colleges: the College of Education and Human Services, the College of Communication and the Arts, the College of Law and Government, the College of Administration and Management, and the College of Theology and Ministry. A master plan for the university projects the addition of several graduate schools and an eventual enrollment of 3,500 students, including many international students. On-campus enrollment



in Fall 1987 was 900.

The CBN University campus has as its centerpiece a 152,000 square foot library and classroom building, housing four graduate schools and a library with capacity for 600,000 bound volumes and 1 million microforms. This is one of the most sophisticated library-research facilities in the nation: fully computerized and linked to a network of over 6,000 libraries in North America, with access to 100 databases across the coun-

try. The new facility provides the resources and technology to support the large number of graduate students expected in the future. Two other office and classroom buildings and a 112-unit student housing complex complete the campus.

The faculty of CBN University are scholars who hold the highest degrees in their disciplines and have experience commensurate with their academic training.

Christendom College

Front Royal

Christendom is a four-year Catholic liberal arts college founded in 1977 by lay Catholic educators. The College offers students a curriculum centered on the truths of Divine Revelation as taught by the Catholic Church, and the truths of natural reason derived from the natural law and human experience. The curriculum integrates the knowledge acquired from these sources. The College fosters in its students a commitment to the lay apostolate, that is, the task of transform-

ing the social order in Christ.

Christendom College grants the Associate of Arts in liberal studies, and the Bachelor of Arts in the following fields: English, French, history philosophy, political science and theology. Students are invited to participate in two career orientation programs in teaching and politics. These programs give the student hands-on experience directed by practitioners in these fields.

Students are drawn from around the United

States. Two-thirds come from beyond the Maryland-Virginia area. The college now has 140 students living on a 77-acre campus bounded on the west by the Shenandoah River and on the east by the Blue Ridge Mountains. A vigorous financial aid program of work-study, loans and grants attracts students who otherwise could not afford private education.



College of Health Sciences

Roanoke

The College of Health Sciences was founded in 1982 as a private junior college offering degree programs exclusively in the health care fields. Situated in Roanoke, in the heart of Virginia's scenic Blue Ridge Mountains, the College offers the broad-based perspective of general education, incorporating humanities and sciences, enhanced by technical knowledge and skills applied to programs of health and human development.

The College of Health Sciences is sponsored by Community Hospital of Roanoke Valley, and as such is the first accredited, hospital-sponsored allied health junior college in the South. The College of Health Science's mission is to provide a learning environment where the separation of theory from practice may be bridged through an educational setting where clinical practice is guided by theoretical perspective, and theory is revised and enlarged through clinical practice.

Education, as defined by Alfred North Whitehead, is the acquisition of the art of the utilization of knowledge. This statement especially characterizes the aim of health sciences education. Through affiliation with Community Hospital of Roanoke Valley, as well as other affiliated hospitals, nursing homes, and rescue squads throughout southwestern Virginia, the College of Health Sciences offers its students hands-on clinical experience to ready them for the demanding role of the professional health care practitioner.

Curricula at the College include associate degree programs in the Emergency Health Sciences, Nursing, Physical Therapist Assistance, and Respiratory Care. The College prepares students to write the credential examinations for

their respective careers, and graduates go on to perform vital roles as professional paramedics, registered nurses, practitioners in the rapidly expanding field of physical therapy, and as life-sustaining providers of cardiopulmonary care. Through a certificate program in Health Services Management, students may augment their credentials to prepare for management positions in a number of health care settings.

The College has its roots in the Community Hospital School of Nursing, which was created in 1965 from the merger of the Lewis-Gale Hospital and Jefferson Hospital Schools of Nursing. The Lewis-Gale Hospital was founded in Roanoke in 1909 by two physicians, Dr. James Newton Lewis and Dr. Sparrell Simmons Gale. The Lewis-Gale School of Nursing was established



in 1911.

The Jefferson Hospital was founded in Roanoke in 1908 by Dr. Hugh Trout, Sr., and was so named because of Dr. Trout's admiration for Thomas Jefferson. The Jefferson School of Nursing was founded in 1914. In 1965, the Jefferson School merged with the Lewis-Gale School to form the Community Hospital of Roanoke Valley School of Nursing. In 1981, the Community Hospital Board of Trustees elected to commit themselves to support of a college which would offer two-year degree programs in nursing and allied health, and provide an enhanced educational system for health career professionals.

The State Council of Higher Education in Virginia granted permission to admit students into two-year nursing and allied health programs in 1982. In 1983, the College of Health Sciences received an associate degree granting authority from the State Council. Accreditation was received from the American Medical Association's Committee on Allied Health Education and Accreditation for the College's programs in Respiratory Care in January 1985; and for Emergency Health Services in April 1986. In December 1986, the College received full accreditation from the Commission of Colleges and Schools.

Today the College continues in its mission to offer the educational programs so necessary to the expanding field of health care. With an eye to the future, and a sense of traditions of accomplishment represented by the distinguished schools which were its forebears, the College of Health Sciences represents 76 years of excellence in allied health education.

At the College of Health Sciences, we offer Education for Life.

Eastern Mennonite College

Harrisonburg

Eastern Mennonite College is a liberal arts and sciences college steeped in the heritage of Christian faith, academic excellence, global awareness and service to humanity. The college offers the Bachelor of Arts and Bachelor of Science degrees in some 40 majors, two-year Associate in Arts and Associate in Applied Science programs, one-year certificate programs, and 27 minors. Professional and pre-professional programs are emphasized with the largest programs in the fields of biology and pre-medicine, business, education, nursing, and social work.

Eastern Mennonite Seminary offers the advanced degrees of Master of Divinity, Master of Arts in Church Ministries, Master of Arts in Religion, and certificate programs in pastoral and biblical studies. The Seminary is accredited by the Association of Theological Schools and ap-

proved by the University Senate of the United Methodist Church. Approximately 100 students from a wide variety of religious perspectives are enrolled in the seminary programs.

The college is a national leader in its emphasis on cross-cultural education. Of the 60 full-time and 15 part-time faculty members, about 75 percent have lived and worked in other countries. Students are expected to integrate a cross-cultural experience into their academic programs. Opportunities for off-campus study include: semester programs in the Middle East, Latin America, and Europe; Washington Study Service Year; and summer seminars in China, Ireland, New Zealand, Appalachia, Mexico, South Africa, and Southeast Asia.

Graduates are encouraged to use their education to improve the welfare of humankind by

working toward world peace, social justice, and equal access to the basic necessities for human life and dignity.

The college student body is composed of about 850 men and women from 33 states and 11 countries. About two-thirds of the students are Mennonites while the remainder are from various other denominations and religious faiths. The educational community is directed to personal attention, intellectual achievement, and professional development. Classes are small; the student-to-faculty ratio is 16 to 1.

EMC and its programs are accredited by the Southern Association of Colleges and Schools, the National Council for Accreditation of Teacher Education, the National League of Nursing, the Council for Social Work Education, and the American Dietetics Association.



Eastern Virginia Medical School of the Medical College of Hampton Roads

Norfolk

The Eastern Virginia Medical School (EVMS) of the Medical College of Hampton Roads began with a 1964 study by the State Council of Higher Education which concluded that the development of a medical school in eastern Virginia "could be the focal point of a third major health center in Virginia, attracting physicians to the State, providing more education opportunities for Virginia students and elevating standards of health care through the State." Based on this conclusion, the General Assembly created the Norfolk Area Medical Authority as the body responsible for the development of EVMS. In 1987, the General Assembly changed the name of the Authority to the Medical College of Hampton Roads to reflect more accurately the regional support for the Eastern Virginia Medical School.

The Medical College operates a community-based medical education system using both private and public support and the resources of the community to promote its educational activities. The core of this system is the Eastern Virginia Medical School, a 384-student medical education program utilizing the health and medical facilities of the region. Other programs operated in support of EVMS include:

- A Research Institute conducting related sponsored research;
- The Eastern Virginia Graduate School of Medicine, a regional 281-resident program in 18 disciplines; 13 area hospitals, and three other community sites;
- The Psychiatric Institute, an 82-bed psychiatric hospital that provides mental health services on an inpatient, outpatient and emergency care basis; and,



■ The Medical Services Programs, a group of Eastern Virginia Medical School faculty including 118 M.D.s and 51 Ph.D.s and LCSWs who staff 55 medical practice units (including family medicine, pediatrics, internal medicine, OB/GYN), providing professional patient care services.

The major aim of EVMS is to produce scientifically able, compassionate practitioners with a major emphasis in primary care. The Medical School was established as a three-calendar year program leading to a Doctor of Medicine degree; conversion to a four-calendar year program began July 1983 and all succeeding classes have utilized the four-year curriculum. At present there are 96 students per class.

EVMS also provides continuing medical

education programs for physicians in eastern Virginia. The Eastern Virginia Inter-Hospital Medical Education Committee (EVIMEC) provides continuing health education programs for staff members of the 31 area hospitals now affiliated with EVIMEC. The Medical School does not own a major teaching hospital but, acting in partnership with the communities of Eastern Virginia, has developed a broad variety of clinical educational and service programs.

In 1978 the Medical College was granted permission to offer master's and Ph.D. degrees as well as to participate in a joint program in clinical psychology (Psy.D.). The joint program is offered by the College of William and Mary, Old Dominion University and the Medical College of Hampton Roads in association with Norfolk State University.

A similar joint program at the Ph.D. level in biomedical sciences, using the resources of Old Dominion University and the Medical College of Hampton Roads, began in July 1979. The Medical College also offers a Master of Science program in Art Therapy and provides training sites for psychology interns.

In 1974 the Medical College organized the Eastern Virginia Graduate School of Medicine to oversee the post-M.D. residency training programs in the associated hospitals in eastern Virginia. The Graduate School of Medicine now operates 19 different programs in 14 regional hospitals, serving 284 graduate medical students.

Currently over 750 members of the community have appointments to the faculty of the Eastern Virginia Medical School and are involved in curriculum development and implementation at all levels of the medical education continuum.

Emory & Henry College

Emory



Founded in 1836, Emory and Henry College has as its motto the Latin phrase, "Macte Virtute," which translates to mean "Increase in Excellence." The College encourages students to give their best in the context of rigorous academic work, a competitive athletic program, and extracurricular activities such as campus government and an award-winning choir.

"Macte Virtute" has an alternate translation, "Increase in Goodness," which echoes Emory & Henry's desire also to have students develop a strong value system. Affiliated with the United Methodist Church, the College encourages a concern for values through an annual series of provocative lectures and films, special interest groups, affiliation with a local church congregation, and opportunities for dis-

cussion both in and outside the classroom.

In the pursuit of excellence and goodness, Emory & Henry has adopted admissions procedures which give priority to students who possess—in addition to solid academic preparation—a commitment to service and leadership, a bias for action and involvement, and an enthusiasm for learning.

The academic program at Emory & Henry includes a General Studies core required of all students. The General Studies courses help students to develop strong skills in reasoning, critical thinking, and writing; to acquire general knowledge of classic Western literature; to consider questions of faith and of values; and to understand the dimensions of global problems. Because the College places a high premium on

individual initiative, classes are small, the faculty-student ratio is 1 to 14, and are heavily oriented toward discussion and writing.

Emory & Henry awards Bachelor of Arts and Bachelor of Science degrees. The college has 20 primary departments and programs with options for interdisciplinary study.

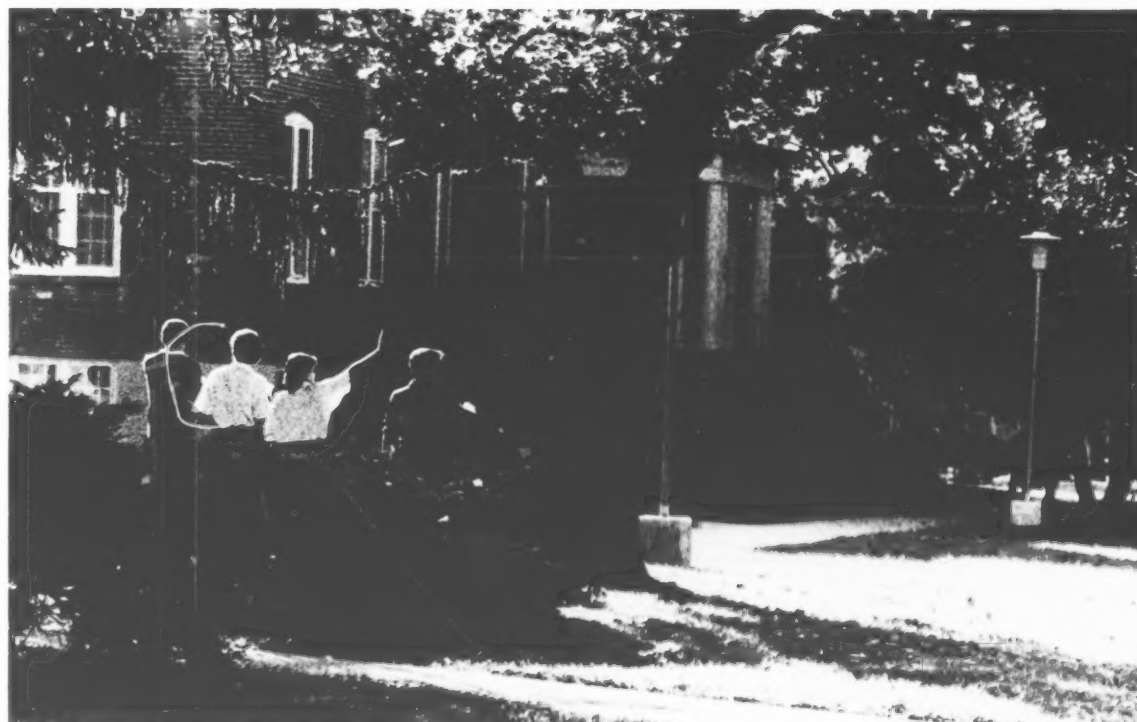
The enrollment of around 800 is almost equally divided between men and women students. Approximately two-thirds of all the students reside on campus. The majority of Emory & Henry students are from Virginia, but the College currently has students from ten other states. The College plans to remain predominantly small and residential.

Ferrum College

Ferrum

The location of Ferrum College in the heart of the Blue Ridge Mountains helps establish the environment of learning necessary for a quality four-year, liberal arts institution. At Ferrum, students are nurtured by the entire college community in their pursuit of courses of study and the establishment of intellectual relationships which influence their adult lives. From the beginning, Ferrum's purpose was to offer superior educational opportunities, based on Christian principles, for students of all ages. The institution began in 1913 as Ferrum Training School, offering elementary and secondary education through six branch schools in the Virginia Mountains. In 1926, a two-year collegiate curriculum was added, and in 1955 Ferrum became exclusively a two-year junior college. Ferrum began offering four-year, baccalaureate programs in 1974 and received accreditation from the Southern Association of Colleges and Schools in 1976. Organized by the Methodist women, Ferrum continues to be associated with the Virginia Methodist Conference.

Now a coeducational and residential college, Ferrum offers bachelor's degrees (B.A. and B.S.) and associate degrees (A.A.&S. and A.F.A.). Baccalaureate degree offerings feature 32 program areas: administrative services, agriculture, biology, business administration, child development, computer science, drama, English, environmental science, fashion merchandising, financial management, fine arts, French, general business, history, international studies, liberal studies, marketing, medical technology, outdoor recreation, philosophy, political science, pre-professional science, professional music, psychology, public administration, recreation and leisure, religion, religion/philosophy, social work, and Spanish.



Although the majority of Ferrum's 1,100 students come from Virginia, the College attracts students from 21 other states and several countries. Ninety-one percent of the students reside on campus.

Small classes and a student/faculty ratio of 13 to 1 provide students the opportunity to form close relationships with their professors. Since most faculty and staff live on campus, they are able to provide a high degree of personalized attention to the students, a distinguishing characteristic of the college.

Ferrum College also has a proud heritage of

selfless community service and a strong interest in preserving the traditions and culture of the Blue Ridge region through the varied activities of the College's Blue Ridge Institute. Each fall more than 30,000 people visit the 754-acre campus for the Blue Ridge Folklife Festival. The community presence of Ferrum College also manifests itself through the cultural and educational activities of Stoneleigh, the former home of Gov. and Mrs. Thomas B. Stanley, Sr., now owned by the College and located near Martinsville.

Hampden-Sydney College

Hampden-Sydney

Hampden-Sydney, a four-year liberal arts college for men, has been in continuous operation since January 1776. The College is committed to the belief that liberal education provides the best foundation not only for a professional career but also for the challenges of life. In this regard, a student may choose to concentrate in any one of the 28 majors within the areas of the humanities, social sciences, or natural sciences. The College offers the Bachelor of Arts and the Bachelor of Science degrees and prepares students for professional training in law, medicine, government, teaching, the ministry and other career fields.

Basic to the success of the College's program is the faculty, 90 percent of whom hold earned doctorates in their fields. The student to faculty ratio is 13 to 1, and the average class size is 20 to 25. While the College places primary emphasis on teaching skills, faculty research is encouraged as an aid to improving the quality of teaching.

About 54 percent of Hampden-Sydney's 830 students are from Virginia. The College actively recruits students from broader geographic, ethnic and cultural backgrounds.



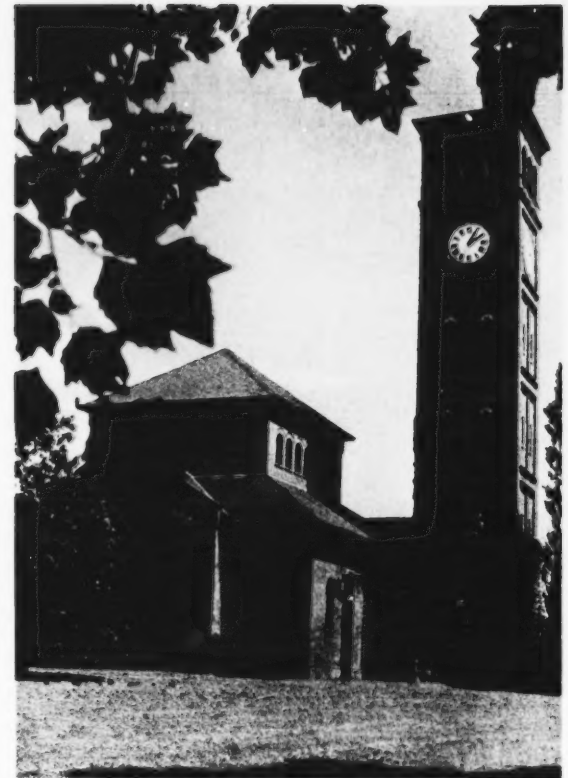
Hampton University

Hampton

Hampton University was founded in 1868 by Samuel Chapman Armstrong, a 27-year-old Union Brigadier General who sought to provide an "Education For Life" for newly-freed Negro men and women. It was one of the first coeducational colleges of its kind in the United States. A small, private, residential, coeducational liberal arts college, Hampton offers educational opportunities to qualified students regardless of race, color, creed, sex or extent of handicap.

Under the university structure, instituted in 1984 by the Board of Trustees, Hampton University is divided into three areas—Hampton Institute, the Undergraduate College, the Graduate College and the College of Continuing Education. This new structure reflects the significant academic growth and diversity of the college as well as its never-ending commitment to educational excellence. The University offers baccalaureate degrees in 47 areas and the master's degree in 17 areas. It emphasizes the liberal arts, science, engineering, humanities, teacher education, architecture and nursing. Hampton University is one of only two colleges in the nation that has been licensed and financed by the Federal Aviation Association (FAA) to offer a degree in airway science. The new fire science program, offered in the College of Continuing Education, is one of seven such programs available in the United States, and the only one of its kind in Virginia.

Hampton's faculty consists of 300 professors, 45 percent of whom hold earned doctorate degrees. Hampton's faculty is a diverse and dedicated group from across the United States and around the world. A student to faculty ratio of 16 to 1 enables professors to build a rapport with their students and to develop academic pro-



grams geared toward individualized instruction. Because the faculty is required by contract to do research, they are able to provide students with a myriad of educational expertise.

Hampton's student enrollment was 5,147 in Fall 1987. These students are a unique, articulate and intelligent group. They rank among the best in the nation. Strong academic programs, a variety of extracurricular activities and a lovely campus attract outstanding students to Hampton University year after year.

Hollins College

Hollins

Founded in 1842, Hollins is one of Virginia's leading liberal arts colleges with nationally recognized programs in creative writing and psychology, and a strong international focus.

Hollins has produced more Pulitzer Prize winners and published writers proportionately than any college in the country. They include Annie Dillard, Henry Taylor, Mary Wells Ashworth, Elizabeth Forsythe Hailey, Lee Smith, Tama Janowitz, Madison Smartt Bell, Katie Letcher Lyle, Jill McCorkle and Garrett Epps. In the psychology department, faculty and students are conducting innovative research on the brain, stress, and speech therapy. The Hollins Communications Research Institute is one of the world's most successful stuttering treatment centers.

International studies include the chance to live in Paris or London as part of Hollins Abroad; courses in six languages; and an international focus throughout the curriculum.

Through an unusually strong financial aid program, more than half the students receive financial assistance. The average aid award is \$8,000. Local residents automatically receive tuition grants, and Hollins is committed to meeting the full financial need of all admitted applicants.

Eighty-five percent of Hollins faculty hold the highest degree in their field. Class size averages 16 students, and the faculty-student ratio is 1 to 10. Enrollment is about 1,000, representing 39 states and 12 countries.

The Hollins calendar, a 4-1-4 plan, features two 12-week terms and a month-long Short Term in January. During Short Term, students participate in career internships or travel-study programs, or elect to take one intensive course

on campus.

Hollins offers an undergraduate program for women with majors in 23 fields. Coeducational master's degree programs are in English/creative writing, psychology, and liberal studies.

The 450-acre campus is located in Roanoke, a metropolitan area of 225,000. Hollins is 10 minutes from a major airport and 20 minutes from the Appalachian Trail.



Institute of Textile Technology

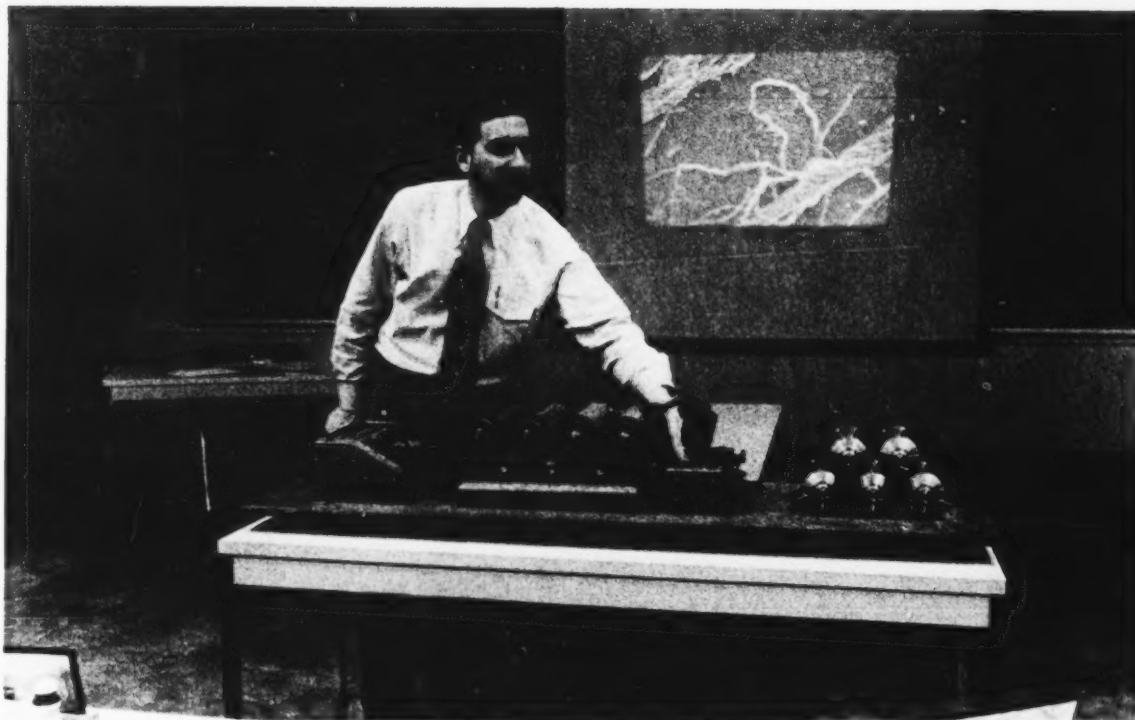
Charlottesville

A career in textile management requires a solid background in textile technology that must be complemented by management and communication skills and the ability to assess rapidly changing technology. The graduate program at the Institute of Textile Technology is designed to provide what will be needed to succeed in a leadership career in this industry—to meet the challenges of the twenty-first century.

The common denominators for students entering the program are a sincere interest in the textile industry, intellectual ability and leadership potential. Their educational backgrounds are diverse. Although many students arrive with undergraduate degrees in textiles, ITT also welcomes applications from students with degrees in the physical sciences, business administration, mathematics and the social sciences.

The Institute offers a common core of courses in the textile sciences, analytical methods, business management, and written and oral communications. These courses are supplemented by group technical projects through summer internships; on-site examination and study of facilities of operating textile companies; seminars with outstanding experts from industry and other research laboratories; and close contact with Institute research projects. Each student is assigned a computer equipped with a 20-megabyte hard disk drive, color monitor, printing facilities, and software for personal use until graduation.

ITT's program is unique in other ways. Class size is small—typically 18 or fewer students—and close student-faculty relationships are developed. The graduate program is part of an institution focused entirely on the textile industry. It provides intense interaction with the



leaders, concerns, and technology of the industry; participation in state of the art research; and access to the nation's largest collection of textile literature.

Every graduate student receives a generous, non-service fellowship for the nine-month academic year and also is compensated for the three-month research internship conducted during the summer between the first and second year of study. In addition, all tuition and fees are paid from Institute funds. The tuition-paid program, fellowship grant, and summer income provide some financial independence and allow

students to devote more time and effort to graduate education.

Like the industry it serves, the Institute of Textile Technology graduate program offers unique opportunities and formidable challenges. The key to making the most of the opportunities and meeting the challenges is commitment—both individual and institutional. If a student is willing to make that commitment, the Institute and its graduate program will help develop the knowledge, skills and experience required to become a leader in this dynamic industry.

Katharine Gibbs School

Vienna

In 1911, Katharine Gibbs opened her first business school in Providence, R.I. Her commitment to excellence in business education won immediate recognition, and her school grew to thriving educational centers, first in Boston in 1917, then New York in 1918. Today there are 11 Gibbs schools in eight Eastern states: Rhode Island, Massachusetts, Connecticut, New York, New Jersey, Pennsylvania, Maryland, and Virginia. Katharine Gibbs School, Inc. is a wholly-owned subsidiary of Macmillan, Inc. Located six miles outside of Washington, D.C., the institution is accredited by the Association of Independent Colleges and Schools.

The Virginia institution received articles of incorporation from the Virginia State Corporation Commission on August 3, 1983. In August, 1986, full approval was granted to the Gibbs School from the Council of Higher Education to offer the A.A.S. degree in Secretarial Arts, Accounting, and Hotel/Restaurant Management. Certificate programs include: One-Year Secretarial, One-Year Information Processing, One-Year Travel and Conference Planning, 13-week Entree Program; Legal Assistant, Administrative Assistant, and Options Plus comprise programs offered in the Continuing Education Division.

Gibbs philosophy is "excellence in all you do." The institution's mission is to educate and train students for positions in the business community through curricula that combine secretarial training with business-oriented courses. Emphasis is placed on understanding the tools and technologies of the 1980s and the ways in which they affect the methods of business organization and operation. Concurrently, the institution seeks to instill in students a high degree



of confidence and determination, respect for their own standards and beliefs, and the ambition to pursue increasing responsibilities and achievements.

The institution is coeducational, although 95 percent of the students are women. Off-campus housing attracts students from all parts of Virginia, the Carolinas, Delaware, and New Jersey. The two-year Secretarial Arts Program also offers an optional international section, where students may opt to spend their third semester

in England, France, Spain, or Germany.

One hundred percent of the faculty have degrees in their field of expertise. Many combine their practical business experience and education to provide a true sense of the business world today.

Housed in the distinctive Tyson Courthouse Office Building, Katharine Gibbs School is in the hub of Fairfax County, one of the fastest growing economic centers in the country.

Liberty University

Lynchburg

Liberty University, founded in 1971, is an accredited, comprehensive, coeducational institution committed to serious scholarship at the undergraduate and graduate levels. It is divided

into one college and five schools: the College of Arts and Sciences and the Schools of Religion, Education, Communications, Business and Government, and the School of Life Long Learning.



The Schools of Religion and Education offer, in addition to accredited bachelor of science degrees, accredited master's level programs, including the master of education in educational administration, the master of divinity and the master of religious education. Last fall, courses leading to the Doctor of Ministry were also offered. The School of Business and Government is offering courses leading to the Master of Business Administration degree.

The University offers a variety of programs and 83 majors in an environment that emphasizes scholarship and Christian principles. The curriculum is designed to keep students abreast of technological advances in their society while maintaining values that are basic to successful living. The enrollment has steadily increased from 154 students in 1971 to 8,000 in 1987. Students attend Liberty from all 50 states and 34 nations. Placement for graduates has been very successful in all fields throughout the United States.

The campus, located on Liberty Mountain in the foothills of the Blue Ridge Mountains, covers 5,300 acres. The lower campus where the existing buildings are located covers 168 acres and currently has 48 buildings, including six classroom buildings and 27 dormitories.

Liberty University sports competition moves to NCAA I in the fall of 1988. Offering involvement in every major field, the sports department has seen an impressive number of its athletes drafted into professional ranks. Non-athletically minded students find a collage of activities available from debate teams to musical groups, from drama teams to political groups. At every level, competition is keen and students are challenged to excel.

Lynchburg College

Lynchburg

Lynchburg College is a private, coeducational, church-related college committed to the liberal arts and professional studies, to undergraduate, graduate and continuing education programs. A college with university choices, its educational mission includes preparation for private life, for public life and for service.

Founded in 1903 on 214 acres within the city, Lynchburg College offers 54 majors, eight joint majors and 45 minor fields of concentration presented by 20 departments, six academic divisions and the School of Business. It awards B.A. and B.S. degrees and has three master's degree programs, 127 full-time faculty members, 1,600 undergraduates and 600 graduate students.

Lynchburg College is characterized by quality as well as equality in a human-sized environment. With a faculty-student ratio of 1 to 15, it offers a strong faculty advisory system and study skills program in reading and specific disciplines that include special tutors in mathematics, a professionally staffed writing laboratory and instruction in time management.

Each summer 150 rising high school seniors participate in the College's Hopwood Summer Scholarship Program, which offers them the opportunity to be considered for Hopwood Scholarships of \$10,000 per student for four years. A smaller group of students participates in the new Westover Fellows Honors Program, which provides a specialized curriculum and \$16,000 in scholarship aid per student for four years.

Scholarship support also includes a special minority students program funded by the Jessie Ball duPont Religious Charitable and Educational Fund. Almost 77 percent of Lynchburg College students from 30 states and 20 foreign countries receive some type of financial scholar-

ship aid. Forty-four percent of the total scholarship recipients receive scholarship aid based on academic proficiency or other criteria.

Lynchburg College's outreach and impact are regional, national and international and of special importance to Central Virginia. The college has a medical technology program in connection with Lynchburg General Hospital and a B.S. degree program to prepare professional nursing generalists who work in 14 area health care facilities as part of their clinical education. Its ACCESS program is instrumental in helping area students, ages 25 and over, pursue under-

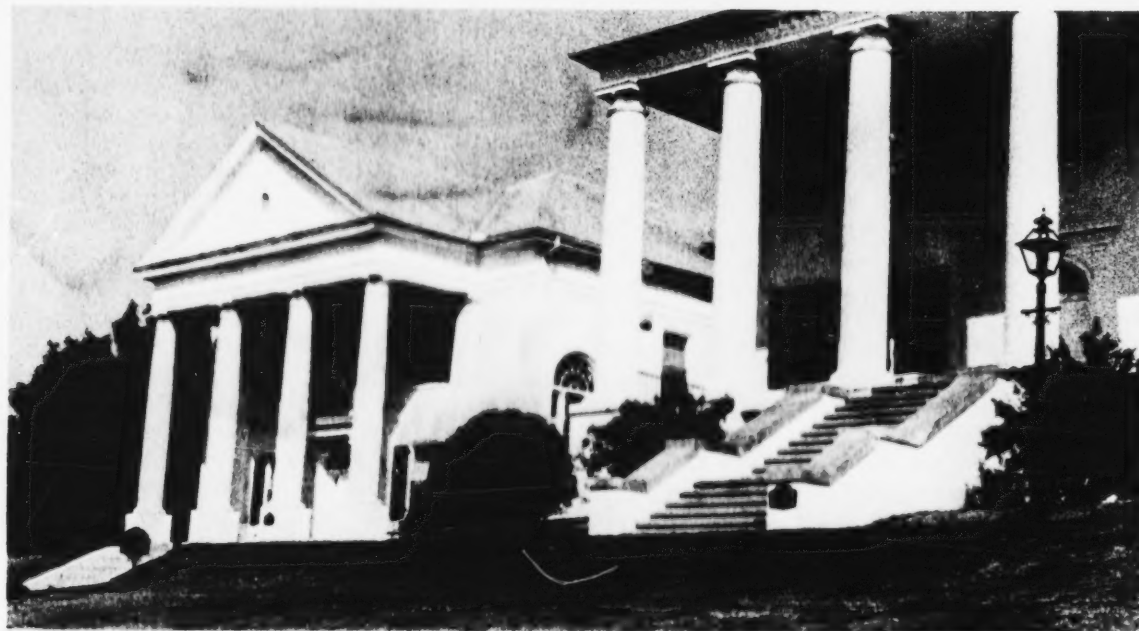
graduate degrees. The Piedmont International Business Program, established by the college in 1986, strengthens the international dimension of the Lynchburg College curriculum.

Through a satellite connection to a statewide system, Lynchburg College receives live instruction in graduate engineering so that area industrial personnel may complete advanced degrees. The campus is also the location for the Center for Economic Education, funded by Lynchburg College and the Greater Lynchburg Chamber of Commerce, to assist public schools in the area.



Mary Baldwin College

Staunton



Mary Baldwin College, a liberal arts college for women related to the Presbyterian Church (U.S.A.), offers the Bachelor of Arts degree. Founded in 1842 as Augusta Female Seminary in Staunton, it became a junior college in 1916 and a four-year college in 1923, at which time the name was changed to Mary Baldwin College.

Mary Baldwin College offers 26 majors and 21 minors as well as ROTC, pre-med, pre-law, and teacher certification programs. Programs run the gamut from traditional liberal arts disciplines to emerging fields such as computer science, marketing communications, and human resource development. The College has a very active Asian Studies program featuring an ex-

change program with Doshisha Women's College, one of the premier colleges in Japan, year-long study at Kansai University in Osaka, and externships with Japanese politicians and businesses in Tokyo. MBC embraces the concept of individualized education and has one of the highest proportions of custom-designed majors in the state. It has formal agreements with Washington University leading to a degree in engineering, with the University of Virginia leading to a 5-year BA/M.Ed, and with Vanderbilt University leading to a 5-year BA/MSN in nursing.

Recognizing the role of technology in the lives of graduates, MBC has implemented the highest dollar value of instructional technology

per student of any private college in the Commonwealth. Students may work at computer work stations in every classroom building on campus. There are 20 mainframe terminals and 60 microcomputers for students along with desktop publishing, multi-color plotters, and a vast assortment of sophisticated software. Each student is issued a free "starter pack" of useful software. The innovative Communications Institute serves as a remote studio for a commercial TV station. Students use its state of the art printed material, instructional videos for private firms, news releases for commercial TV stations, and video yearbooks and diaries for alumnae.

MBC enrolls 600 students of traditional age in its on-campus program, but it also enrolls 450 students in two non-traditional programs. The Program for the Exceptionally Gifted was established in 1985 with the aid of a \$1.2 million grant from the Jessie Ball duPont Foundation. It currently enrolls 45 young women from across the country who have shown an ability to do college-level work after eighth grade. The students participate in a five-year program leading to both high school and college graduation. The program features a combination of unique courses designed to fit the special abilities of these young women and an intensive program of cultural, extracurricular, and community service-oriented activities. The Adult Degree Program, which has grown steadily since its inception in 1977, enrolls over 400 men and women in a non-residential, individualized degree program which permits a student to work independently. In all, Mary Baldwin enrolls 1,000 students in regular credit courses as well as an additional 2,000 in continuing education and summer programs.

Marymount University

Arlington



Marymount University is a coeducational independent university enrolling more than 2,800 students in undergraduate and graduate programs. At the undergraduate level, the University focuses on the education of men and women and enrolls approximately 1,500 students. Graduate programs are also coeducational and enroll about 1,000 students.

Marymount considers itself a comprehensive university with a strong emphasis on liberal arts and career preparation in marketable fields. Each graduate of its undergraduate programs has completed an internship in a corporate, governmental or social service setting in the Washington, D.C., or Northern Virginia area.

The main campus of the University is located in residential North Arlington. Nearby is the Academic Computer Center, located at the Spout Run Campus. Off-campus instruction is offered at the Pentagon, at several corporate sites in McLean and Reston and at several hospitals and medical centers in the area.

Marymount University was founded in 1950 by a Catholic religious order internationally

known for development of schools for women. In 1960 the College was incorporated as a Virginia educational nonprofit organization. Governed by a board comprising lay and RSHM members, the trustees include more than 30 alumni, attorneys, bankers, businessmen and women, educators and representatives of other professions. Members demonstrate interest in guiding Marymount's academic offerings while at the same time assuring its financial and legal health. In 1986, with the continuing growth of Marymount's academic offerings at both graduate and undergraduate levels, the Board of Trustees adopted a change in nomenclature from Marymount College of Virginia to Marymount University effective in the fall of that year.

Marymount offers the M.A., M.B.A., M.Ed., M.S.N., B.A., B.B.A., B.S., B.S.N., A.A., and A.A.S. degrees. Undergraduate programs are offered in 32 fields. The University is organized into four Schools: Arts and Sciences, Business Administration, Education and Human Services, and Nursing. Marymount is a member of the Virginia Foundation for Independent Colleges.

National Business College

Roanoke



National Business College, an accredited, independent junior college of business, has provided business education for over 100 years. Accredited by the Association of Independent Colleges and Schools, National Business College



offers associate degrees and diploma and certificate programs that emphasize preparing the student for a specific job in one of 15 fields.

National Business College recognizes the importance of updating and adapting program

offerings and course requirements. Additionally, the faculty strives to make course material relevant to the job that each student seeks. Program areas include accounting, management, computers, secretarial science, medical assistant, fashion merchandising, and travel and tourism.

National Business College has added five branch campuses to its Roanoke base: Bluefield, Charlottesville, Danville, Lynchburg and Martinsville. Recently, NBC expanded its Roanoke facilities to a new building which provides students with a cafeteria, student lounge, gym and department learning centers. Computers, word processors and other office equipment allow students to gain valuable practical business experience. NBC operates a women's residence hall in downtown Roanoke which can house 200 women and includes a cafeteria and leisure center.

National Business College encourages students to utilize all physical facilities as well as support services, such as Special Services and the Career Placement Center. Working under the support and guidelines of a federal grant, Special Services counselors and tutors help students understand material, earn better grades and learn new skills for a future job. The Career Placement Center teaches students about job-search skills and career development and assists students in finding rewarding jobs. In 1987, 89 percent of NBC's graduates accepted jobs in the area of their major.

Attracting a diverse mix of students from Virginia, West Virginia and North Carolina, National Business College faculty and staff help individual students learn and grow, intellectually and professionally. National Business College's size permits individualized attention and concern toward students.

Presbyterian School of Christian Education

Richmond

The Presbyterian School of Christian Education is a graduate center for educational ministry established in 1914 to "prepare men and women for service in church vocations with emphasis upon the educational work of the church at home and abroad." Although it is one of the theological graduate schools of the Presbyterian Church (USA), it is a unique, ecumenical institution serving all Presbyterians and more than 20 denominations.

Students in the small and select student body of approximately 130 represent 22 states and 13 foreign countries. Graduates are in demand as directors of Christian education in local churches, as church educational administrators, youth ministers, recreational and camp directors, early childhood education teachers, and other service-oriented occupations. For the past five years there have been more positions available than there have been graduates to fill them.

The master of arts degree with emphasis on Christian education is the central two-year degree program, although students and graduates of accredited seminaries may receive the degree in one year. A master of arts with emphasis in church music and Christian education and a master of arts in Christian education and social work are both offered in cooperation with Virginia Commonwealth University. There is also a doctoral program in religious education. The doctor of education degree at the Presbyterian School of Christian Education is a professional degree. Candidates must have a minimum of two years' professional experience in Christian education in addition to a master's degree.

The graduate programs provide both skills, training and a strong theoretical foundation for educational decision-making. The curriculum in-

tegrates three areas of study—biblical, theological and educational. Nearly one-half of each program consists of required courses and the remaining coursework is composed of electives chosen by the student and faculty advisor to meet the student's career goals and interests. Theory and practice are equally emphasized.

The diversity of the curriculum has led to the development of models for ministry which

reach out to the community, to the church nationally, and to religious education in all denominations. Models for ministry include the Center on Aging which helps church leaders minister to older adults; a childhood education center; a video education center, and a recreation program for the surrounding community. The Continuing Education Center holds events throughout the year.



Protestant Episcopal Theological Seminary in Virginia

Alexandria

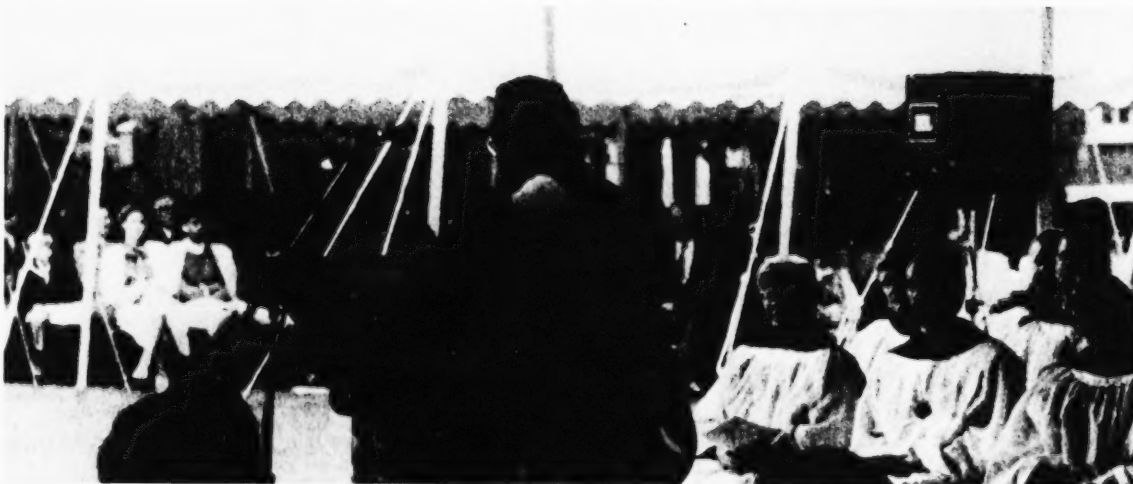
The Protestant Episcopal Theological Seminary in Virginia was founded in 1823 to educate men for the ministry. It now seeks to prepare both men and women for leadership, either as clergy or lay people, in the church and the world. The Seminary offers programs leading to the degrees of Master of Divinity, Master in Theological Studies, and Doctor of Ministry.

The Seminary is a residential, coeducational theological school of the Episcopal Church providing theological education for individuals interested in preparing for the ministry or other areas of service to the church. The wide variety of required and elective courses in the curriculum demands a diversity of teaching methods. At the same time independent work by students under supervision of faculty members is encouraged. Field education, required of all students, involves both students and faculty in a diversity of public service activities.

The Seminary has maintained a center for continuing education since 1967 for the "mid-career" training of individuals. The Seminary is a member of the Washington Theological Consortium. This consortium is intended to increase cooperation in theological education in order to take advantage of the resources of the Washington metropolitan area.

Considerable emphasis is placed upon individualization of education through close student-faculty relationships, possibilities for independent study, and the opportunity for students and their advisors to create individualized programs of study. The Seminary serves a wide range of students including those of other nationalities. In the midst of a growing urban area, the Seminary uses its geographic location to involve students in the major issues of urban life.

Faculty are encouraged to maintain a continuing interest in research and study. Independent programs of study provide students with the opportunity for individual research.



Randolph-Macon College

Ashland

Randolph-Macon is an independent, coeducational, liberal arts college. Founded by Methodists in 1930, the college maintains a relationship with the United Methodist Church. Through this living tie the College draws strength from a religious tradition that nurtures creative social change and personal accountability.

At Randolph-Macon College the liberal arts constitute a comprehensive educational opportunity. The curriculum includes exposure both to broad perspectives and specific concepts. Students explore the natural and social sciences, the arts and the humanities, while they also achieve a deeper understanding of the single discipline in which they major. They are challenged to communicate effectively, to think analytically and critically, to experience and appreciate the creative process, to develop qualities of leadership, and to synthesize what they know with who they are. They are guided in this endeavor by a faculty of teacher-scholars who are dedicated to the liberal arts and active in their professional disciplines and in the extracurricular life of the campus.

At Randolph-Macon the maturation and testing of the skills, values, and character required for a lifetime of challenges extends beyond the classroom. Students are encouraged to meet with faculty both socially and intellectually, and they have the opportunity to participate in a variety of extracurricular activities. Interaction within the College community is assured by a residential environment and an enrollment of approximately 1,000.

Students become involved in research through programs with faculty and special courses designed for the four-week January term. An internship program provides diverse



opportunities for students to gain practical experience in potential career fields. An approved program for Virginia teacher certification is offered. The College offers study abroad programs in France and Spain.

The College is primarily residential and draws about 65 percent of its students from Vir-

ginia. The remainder come from Maryland, New Jersey, Delaware, Pennsylvania and other states. Women comprise 48 percent of the students. Three-quarters of the students are graduates of public schools. The enrollment in 1987-88 was 1,052.

Randolph-Macon Woman's College

Lynchburg

Founded in 1891, in an era when the value of a college education for women was questioned, Randolph-Macon Woman's College has demonstrated from the beginning its commitment, not only to the education of women, but to an education within the humanistic tradition that is characterized by excellence. R-MWC was the first woman's college accredited by the Southern Association of Colleges and Schools, and its charter for Phi Beta Kappa, obtained in 1916, was the first to be granted to an independent woman's college in the South. A four-year liberal arts college located in Lynchburg, it has its own governing board of trustees and is affiliated with the United Methodist Church.

According to the College's catalog, "There is no better preparation for a woman's challenges and responsibilities, however she chooses to define them, than an education which affirms her significance as an individual."

The College's dedication to the principle of individuality is reflected in an academic program that offers flexibility and choice for the student. Through the advising process, students are given primary responsibility for establishing their own program.

The curriculum is designed to meet the complementary objectives of breadth—a comprehensive background of knowledge, the hallmark of a liberal arts education—and depth—concentration in a field of special interest.

Twenty-nine majors are offered and there are also four interdepartmental majors. For a Bachelor of Arts degree, the curriculum includes study in the humanities and fine arts, the social sciences and the natural sciences. It also prepares students for certification as teachers at the elementary and secondary levels.



Majors in communication, international relations and medical technology were recently introduced, illustrating the College's interest in increasing career opportunities while remaining basically a liberal arts college. Apropos of this interest, the College has a Career Development Center and offers a comprehensive internship program. In addition, minors are offered in computer science and in economics and business administration. There are also a number of special educational opportunities available, including

the popular Junior Year Program at R-MWC's Center at the University of Reading in England.

For all students, the College emphasizes writing and computer skills, and for students interested in going into education, law, medicine or specific graduate programs, early attention is given to choosing courses that meet postgraduate requirements.

Teaching comes first for the R-MWC faculty. Research and publication are undertaken primarily to enhance the classroom experience. Of the 70 full-time faculty, 88 percent hold doctorates or comparable equivalent terminal degrees. There is a faculty to student ratio of 1 to 10.

Students come from 43 states, the District of Columbia and 18 foreign countries. The majority are from the southeastern United States, with Virginians constituting the largest group. The College expects to continue its status as a single-sex institution, although men may take courses. Randolph-Macon Woman's College serves students from a wide range of social and economic backgrounds.

Women of non-traditional college age are encouraged to continue their education through the Prime Time Program. Special support services and major scholarships help to make the transition into higher education easier for these students.

R-MWC recognizes that it is important to be an integral part of the community and encourages public attendance at its many cultural programs. It also provides facilities for, and works closely with, the Women's Resource Center of Central Virginia, a private organization which offers extensive educational service to women in the area.

Roanoke College

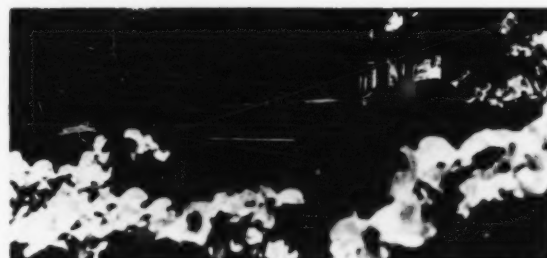
Salem

Roanoke College was founded near Staunton in 1842 by two pioneer Lutheran clergy, David F. Bittle and Christopher C. Baughman. Originally known as the Virginia Institute, the school was chartered in 1845 and moved to Salem in 1847, when it was renamed the Virginia Collegiate Institute. In 1853 the Virginia legislature granted the institution a charter as Roanoke College, raising it to the rank of a college. The college remains affiliated with the Lutheran Church in America.

Since its founding, the college has offered a program of study grounded in the liberal arts. As a coeducational, baccalaureate-level institution with approximately 1,300 students, Roanoke College has a resident student body of about 900. Another 300 full-time students commute, while the remainder are part-time. Half of all students enrolled are Virginians. Large student populations come from Maryland, Pennsylvania, New Jersey, New York, and New England.

The college offers programs leading to the Bachelor of Arts, Bachelor of Science, as well as the Bachelor of Business Administration degrees. Roanoke observes an "early semester" calendar which includes two four-month terms and an optional May Travel Term.

There are currently 26 majors offered, and twenty-one minors; they are administered through 12 different departments. In addition to majors in most of the traditional liberal arts, several interdisciplinary majors are offered (International Relations, Criminal Justice, Urban Studies) plus several in more specialized areas, such as elementary education and health and physical education, and computer science and statistics. The College maintains a strong undergraduate emphasis in the natural sciences



and in mathematics. In the social sciences, students combine strong academic preparation with internship possibilities. A concentration in social work is offered, and a Center for Community Research has been established. The Center will increase student as well as faculty involvement in community projects. Other concentrations are available in accounting, athletic training, international analysis, and computer science, as well as pre-professional preparation in medicine, dentistry, engineering, law and ministry.

In the Fall of 1986, the College began an Honors Program which replaces the usual distribution of general requirement courses for Honors students. The program will serve as a model curriculum, not by being more difficult, but by meshing the subjects normally included in general requirements into a sequence of interdisciplinary courses.

The College has also renewed its focus on the special needs of freshmen with preregistration of all students and the establishment of a Learning Center and a centralized peer-tutoring facility.

An extensive cooperative relationship with Hollins College has developed over the years. Students may cross-register at the colleges during regular semesters. In some majors, such as German, students may complete the program re-

quirements only by taking courses at the other college. A career counseling consortium presently is operating with the joint sponsorship of Roanoke College, Hollins College, Virginia Western Community College and the area public schools. In addition, Roanoke belongs to the Western Region Consortium for Continuing Education.

The continuing education effort is growing steadily, and short-term programs and summer educational opportunities are being designed for special groups in the area. The College also offers educational opportunities and counseling for adult students.

Roanoke College emphasizes the "total teaching" concept in which teaching is seen not merely as a classroom activity, but as the total effect of teachers interacting with students—as instructor, as advisor, as scholar, as conveyor of values. Faculty members are encouraged by strong programs of support to engage in scholarly activities, especially those involving students. The faculty development program, New Dimensions in Total Teaching, provides awards for improvement in teaching.

Several professorships have been established at the College which enhance classroom instruction, including the John P. Fishwick Professorship in English and the H. L. Harris Professorship in Business Administration and Economics. The Jordan-Trexler Endowment in Religion has enabled the establishment of the Center for Church and Society, which offers educational programs to demonstrate the role of religion in society. Lecturers are provided through the Henry H. Fowler Public Affairs Lecture Series.

Roanoke College plans no major modification in instructional purpose or function in the next decade. Enrollment is near capacity and is expected to remain stable.

Saint Paul's College

Lawrenceville

In February 1883, a parochial school was organized in the vestry room of a small frame chapel in Lawrenceville in Brunswick County. Soon the quarters of the parochial school became too small for the enrollment, and a three-room structure was built to accommodate the increasing population.

Saint Paul's College, as it currently exists, emerged from this humble beginning. From the Saint Paul's Normal and Industrial School (1888) to Saint Paul's Polytechnic Institute (1941) to Saint Paul's College (1957), the institution grew. The College places strong emphasis upon building Christian character. Although operated under the auspices of the Episcopal Church of America, the College is open to students and teachers of all denominations and races.

As a liberal arts career-oriented college, it seeks to develop an intellectual atmosphere in order to meet the broad range of needs of persons who seek admission. In addition to providing the best possible learning environment for its students, the College offers a scope of activities designed to anticipate and fulfill the intel-

lectual, cultural and social needs of its community, both local and extended. Also, the College is committed to innovative approaches in the teaching-learning setting that expand the educational horizons for all students, and to program flexibility which meets the broad range of students' needs. The Honors Sequence Program gives outstanding students the opportunity to explore a variety of learning experiences through an interdisciplinary approach.

The College, with its three departments, offers the degrees of Bachelor of Arts in English, political science and sociology. The Bachelor of Science degree may be obtained in the areas of biology, business administration, office administration, mathematics and general studies. The Bachelor of Science in Education degree is available in biology, business education, elementary education, English, general science, mathematics and social science.

The student body shows a geographical distribution of about 19 states and seven countries. The north-south boundary of the states represented extends from Massachusetts to Florida and the east-west boundary from Maryland to

California.

The capable cadre of instructors represents 40 of the nation's leading colleges and universities. Fifty-nine percent of the faculty hold earned doctorates. Members of the faculty hold 60 memberships in the nation's leading professional organizations.

In the age of a highly complex technological society, each member of the Saint Paul's College community has an invitation and an obligation to participate in an expanding network for the improvement of the quality of life. To meet the technological challenge, each student is required to complete a course in computer information systems. To enhance computer literacy, all students have access to microcomputers to be used for classwork. Students will be able to check out software, diskettes or cassettes from the college library just as books are checked out.

The total resources of Saint Paul's College are committed to the development of students who will be equipped to live effectively in a global society.



Shenandoah College and Conservatory of Music

Winchester



Shenandoah College and Conservatory, located 72 miles west of Washington, D.C. in the Shenandoah Valley, grants degrees in nearly 50 programs. Founded in 1875 in Dayton, the College moved in 1960 to its Winchester campus that now covers 61 acres and contains 12 modern buildings. Shenandoah also owns the historic John Kerr Public School building in downtown Winchester; the century-old structure is restored to its original grandeur and now houses the College's nursing and continuing-education programs.

Shenandoah has four schools: the Conserva-

tory; Arts and Sciences, and Nursing and Health Professions; and the Harry F. Byrd Jr. School of Business. Associate degrees are offered in nursing, respiratory therapy and piano technology.

The College's four-year baccalaureate programs include a variety of music studies; elementary and secondary education; theatre and dance; English; arts management; business administration; the sciences; nursing; computer information systems; philosophy/religion; physical education; history; mathematics; and music and recreational therapy.

At the graduate level, Shenandoah offers master's degree programs in music, music education, business administration, computer information education and reading specialists.

The college emphasizes career preparation, but also intends that its graduates be prepared to pursue graduate study; that they be discerning, effective citizens and creative leaders; and that, having independent learning capabilities, they seek continued intellectual growth.

Shenandoah also stresses a close student-teacher relationship; the student to faculty ratio is 9 to 1. The student population of nearly 1,000 is about evenly divided between men and women from all social and economic levels. More than 75 percent of the students receive financial assistance.

Students come from more than 30 states and a half dozen foreign countries. About one-third of them are from a 60-mile radius and another third are from Virginia and the nearby tri-state area of West Virginia, Maryland and Pennsylvania.

Shenandoah College and Conservatory is affiliated with the United Methodist Church. It is a member of, or accredited by, a number of regional and professional associations, including the Southern Association of Colleges and Schools, the Virginia Department of Education, the National Association of Schools of Music, the National League for Nursing, the Council on Education of the American Medical Association, the Virginia Board of Nursing, the University Senate of the United Methodist Church, the National Association for Music Therapy, the National Collegiate Athletic Association, the Association of American Colleges, and the National Association of Independent Colleges and Universities.

Southern Seminary Junior College

Buena Vista

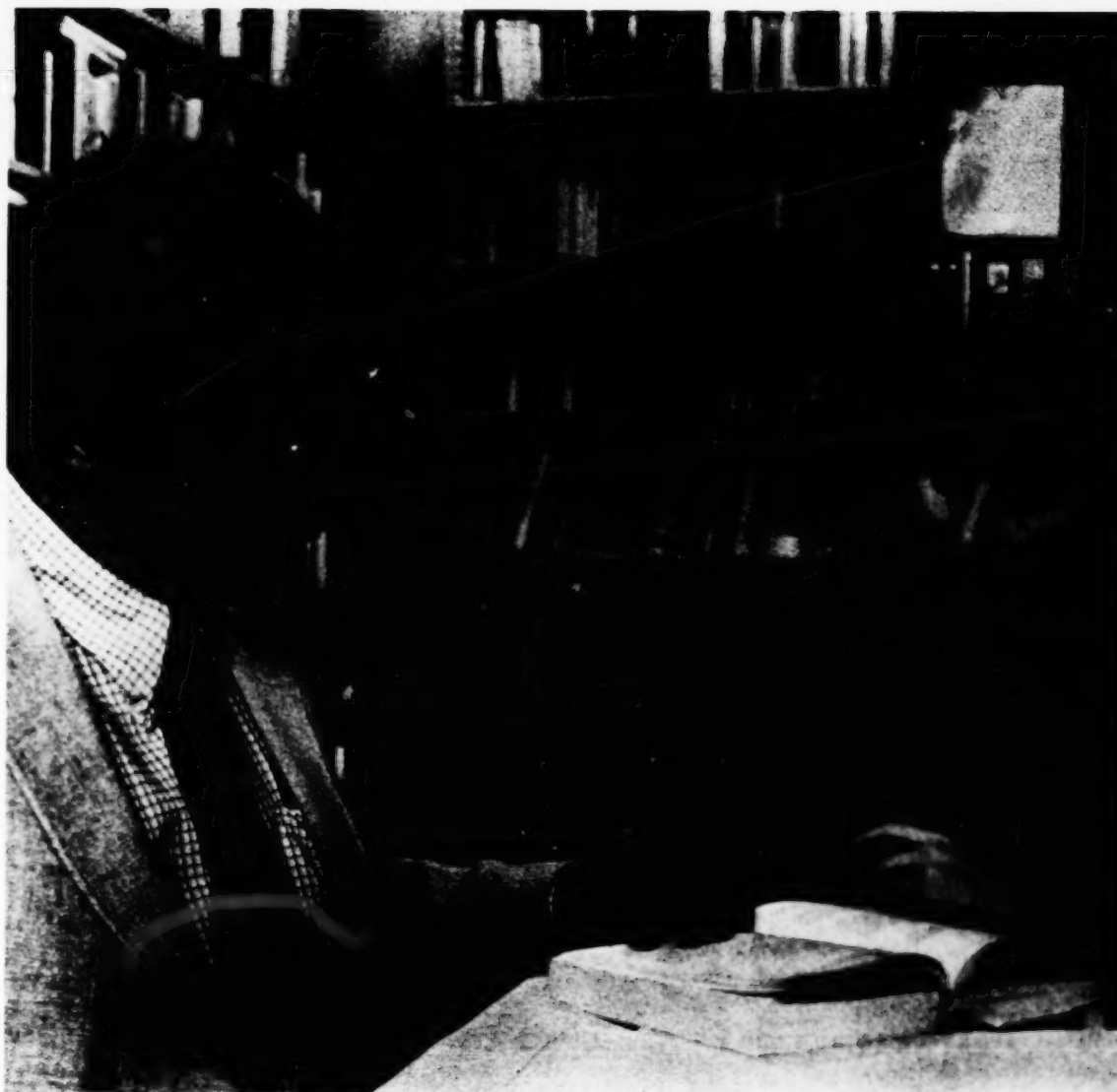
Southern Seminary Junior College is a private, non-sectarian, two-year college with an enrollment of 300 women.

Founded in 1867, Southern Seminary is unique in Virginia. As the state's only private two-year college, Southern Seminary plays a special role and adds a distinctive choice for young women considering the educational opportunities available to them in the Commonwealth.

The college offers three degree programs: Associate in Arts, Associate in Fine Arts and Associate in Science. Majors include liberal arts, animal science, interior design, early childhood education, equine management and physical education. Certificates in horsemanship may also be earned in conjunction with another degree. Students not selecting a degree program may earn a Junior College Certificate.

A faculty to student ratio of 1 to 9, an innovative mentor system which teams instructors and second-year students with freshmen, dedicated teachers, and a strong core curriculum in the liberal arts make the students' transition from high school to college personal and comfortable. A nationally acclaimed riding program helps develop physical responsiveness and leadership.

The mission of Southern Seminary is to provide educational opportunities of the highest quality in an atmosphere of concern for each student's growth intellectually and personally. Southern Seminary fully intends to remain a small, two-year college with a program responsive to the special and changing needs of today's young women.



Sweet Briar College

Sweet Briar



Chartered in 1901, Sweet Briar College is a four-year residential college for women. The aim of the College is to offer sound instruction in the disciplines of the liberal arts, constantly reinterpreted and reorganized to apply to a changing society. To this end, the College also offers interdisciplinary studies, computer science, accounting, business and arts management, and public administration, as well as internships and independent studies. The College confers only the Bachelor of Arts degree.

The institution emphasizes teaching and faculty scholarship, especially that which improves and enriches teaching. Public service activities include programs for cultural enrichment of the local communities, continuing

education for adults who wish to enroll as part-time students or to register in special, non-credit courses designed to meet local needs, special short symposia on contemporary questions, and workshops which address the concerns of today's woman.

Bachelor's degree work is offered in the following fields of concentration: area studies, biological sciences, education, fine and applied arts, foreign languages, literature and letters, physical sciences, psychology, social sciences, and interdisciplinary studies. A new major is offered in Environmental Studies and a program in International Studies has been introduced. An innovative program integrates use of the computer into the liberal arts curriculum, and joint ma-

jors are offered in computer science combined with mathematics and economics. Further significant additions to programs are being considered in area studies, applied arts, interdisciplinary studies, and selected and pre-professional studies.

With a resident enrollment of 98 percent and a full-time enrollment of 99 percent, Sweet Briar's size is expected to remain relatively stationary. Some 40 states and 20 foreign countries are currently represented within a student body of 700. Sweet Briar endeavors to serve all socioeconomic and cultural groups, and a trend of the last ten years has seen increases in the diversity of students from different economic, regional and racial groups.

Union Theological Seminary in Virginia

Richmond

Union Theological Seminary in Virginia, a seminary of the Presbyterian Church (USA), was established at Hampden-Sydney College in 1812 and moved to Richmond in 1898. Union is operated by a Board of Trustees composed of members representing the Synod of the Virginias and the Synod of North Carolina. The seminary's purpose is to provide the highest quality theological education for those preparing to serve the church, to foster continued growth for all ministers through continuing education, and to be a spiritual and educational resource for the whole church. To meet these goals, Union offers a basic program, graduate studies, a program of continuing education, and public access to the Library/Learning Resources Center.

The basic course requires three years, re-

sulting in a Master of Divinity degree. The graduate school offers a program of studies leading to the degrees of Master of Theology and Doctor of Philosophy.

The Doctorate of Ministry degree is a continuing education degree available to ordained pastors who wish to earn a second degree while pursuing their pastoral work. Other continuing education programs are provided to enable alumni and others to study systematically throughout their careers. Both resident and non-resident programs are offered.

The entire program of study is integrated so that each course is related insofar as possible to the other courses and fields of study. Through supervised programs during the academic year and in the summer months, students put into

action the skills and knowledge they are mastering in the classroom.

Among the seminary's professional contributions is its publication of **Interpretation, A Journal of Bible and Theology**. Edited exclusively by Union's faculty, it is subscribed to by pastors, professors, students and others in every state and in more than 90 foreign countries.

Union's student body of about 210 represents 30 some states, and a dozen countries. The average age of the entering class is 31 years. Many of the students already have graduate degrees and have worked as teachers, social workers, doctors, attorneys and directors of Christian education. Nearly all have served the church in a significant way for years as volunteers or elected officers.



The University of Richmond

Richmond



The University of Richmond was founded in 1830 by the Baptists of Virginia and today, as an independent, privately endowed institution, maintains its historic ties with the denomination. The University is composed of the following colleges or schools: Richmond College for undergraduate men, Westhampton College for undergraduate women, the Graduate School, the

T.C. Williams School of Law, The E. Claiborne Robins School of Business (and its Richard S. Reynolds Graduate School), and University College (including summer program, evening and continuing education divisions).

The University of Richmond, situated on a 350-acre campus six miles west of the heart of the city, is the second largest private institution

of higher education in Virginia. Its coordinate structure, however, offers the advantages of a coeducational campus along with the benefits of small, separately administered colleges. Primarily a teaching institution in the liberal arts tradition, the University emphasizes instruction of high quality. The faculty is encouraged to participate in research. The University offers cultural activities and presents programs which are open to the public. Also, the programs of University College, the Women's Resource Center and the Management Institute are available to individuals and community and business organizations.

The University of Richmond offers bachelor's degrees in all the traditional liberal arts and sciences disciplines, plus business administration. It offers master's degrees in business administration, the humanities, education and most of the traditional disciplines in the liberal arts and sciences. In addition, the University offers a Juris Doctor degree through the T.C. Williams School of Law. The University continues to concentrate on strengthening its existing programs by fostering a climate of academic excellence and allocating significant new resources to accomplish this goal.

The University is serving an ever-broadening constituency, with its students coming from all over the country and particularly from the area east of the Mississippi. About 25 percent of the 1987 freshman class are Virginia residents. In the 1987-88 session, full-time and part-time enrollment for undergraduate and graduate student totals 3,300. The University has some 25,000 alumni from every state and 50 foreign countries.

Virginia Intermont College

Bristol

Virginia Intermont is a private, coeducational undergraduate college, offering 16 four-year programs leading to the Bachelor of Arts degree and four two-year programs leading to the Associate in Arts degree.

Founded in 1884 as the Southwest Virginia Institute, Virginia Intermont became identified with the junior college movement in 1910 and was the first two-year institution to be accredited by the Southern Association of Colleges and Schools. Four-year programs leading to the B.A. degree were initiated in 1970.

Virginia Intermont has declared its mission as a serious liberal arts institution providing students with opportunities for critical thinking, creativity, oral and written communication, and cultural appreciation. A recently implemented common core curriculum was developed by the faculty to enhance the well-rounded "working" education that is crucial to graduates in adapting to a changing society.

With a student-to-faculty ratio of 11 to 1, Virginia Intermont affords its students personalized classroom attention that encourages participation in the learning experience. Bachelor of Arts programs are offered in ballet, biology, business administration, education, English, fine art, history/political science, horsemanship, liberal arts, medical technology, music and church music, paralegal studies, photography, religion, social work, and theatre arts. Associate in Arts programs are offered in allied health, general studies, graphic arts, and word processing/secrarial studies.

Although Virginia Intermont enrolls students each year from approximately 35 states, its primary service area is Virginia and the Eastern Seaboard. Increasing numbers of stu-

dents from the areas around Bristol, Tennessee-Virginia are being served.

The College is affiliated with the Baptist General Association of Virginia, but approximately 20 denominations are represented in the student body of about 400.



Virginia Union University

Richmond

For the past 122 years, Virginia Union University has earned a reputation as an institution where students can both learn and develop their leadership abilities.

As a result, the University has produced scores of talented and committed educators, physicians, ministers, politicians, lawyers, businessmen and businesswomen, scientists, community and civic leaders, and athletes whose achievements and contributions have benefitted themselves, their families, communities, and the world community. This success over the years provides the university with a proud history and record upon which to build and prepare future generations.

Virginia Union's mission from the beginning has been to provide Black Americans and others with the knowledge, skills and attitudes needed for the enrichment of their own lives and of the communities in which they will live and serve. With the aid of outstanding teaching and enlightened guidance, the University's goal is to provide students with a solid foundation in the liberal arts and sciences. It accomplishes this goal by encouraging scholarly inquiry and freedom of discussion as necessary components for developing excellence, values, and a sense of personal worth.

The University's academic programs are designed to serve students interested in pursuing careers in the arts and sciences and the professions. The University offers more than 25 undergraduate majors which are distributed through five academic units—the Division of Education and Psychology; the Division of Natural Sciences and Mathematics; the Division of Humanities; the Division of Social Sciences; and the Sydney Lewis School of Business Administration.



In addition, the Graduate School of Theology offers a master's degree program and the opportunity to study at the Richmond Theological Center, a consortium whose members include the School of Theology of Virginia Union, Union Theological Seminary in Richmond, and the Presbyterian School of Christian Education.

The students at Virginia Union may do independent study work and participate in major programs of Teacher Education, Social Work, Dual Degree Engineering and Pre-Law.

The University shows its community commitment through its newly created Center for

Community Services (CSS). While building upon the city-wide Community Learning Week activities held each January in Richmond, the Center allows students to be involved in community projects. Most importantly, the Center provides students with "hands-on" experience in public policy and community action. Another component of the University's community reach is its Center for Teacher Effectiveness.

The vision is that by 1991 Virginia Union University will improve upon its position as a leader among liberal arts colleges and universities in the nation.

Virginia Wesleyan College

Norfolk

Chartered in 1961, Virginia Wesleyan is a coeducational, liberal arts college related to the United Methodist Church. The liberal arts and church-related heritages of the college complement each other and define the values around which the institution has been built. The village concept within the overall architectural plan of the campus supports an institutional commitment to student-faculty dialogue. Located on a 300-acre campus in the center of one of the nation's most rapidly growing metropolitan areas, the college uses this environment to involve students in major issues of urban life. Students also are actively involved on campus in the major decision-making bodies which develop academic as well as student life policies.

Although relatively young, Virginia Wesleyan shows many signs of maturity. Enrollment has risen to 1,200 students who come from 33 states and ten countries. Approximately 25 percent of the college's graduates enter either graduate or professional studies. Much of the strength of the institution resides in its nationally recruited faculty, 71 percent of whom hold doctorates or other terminal degrees for their teaching fields. The College places emphasis on excellence in teaching and on close student-faculty relationships. The student to faculty ratio is 16 to 1. Faculty members are encouraged to maintain an interest in research and study. Independent programs of study provide students with the opportunity for individual research.

Students may choose a divisional major in the humanities, social sciences, or natural sciences and mathematics, or they may select a departmental major in one of the following specific disciplines: art, art education, biology, chemistry, communications, computer science/mathe-



matics, education (elementary or secondary), English, French, mathematics, modern foreign languages (French and Spanish), music, philosophy, recreation/leisure services, political science, psychology, religious studies, sociology and theater. Inter-divisional majors are offered in American Studies, human services, international studies and management/business/economics. Successful completion of any of these programs leads to the Bachelor of Arts degree. Special advisors are available to students interested in pre-law, pre-medicine and pre-theology.

Virginia Wesleyan College believes that educational institutions must remain relevant to the changing needs of students. Consequently, there is an institutional emphasis upon constant re-examination and experimentation.



Washington and Lee University

Lexington

In 1749, Scotch-Irish pioneers founded a small classical school near what is now the city of Lexington. In 1776 the institution was named Liberty Hall, and in 1782 it was chartered by the Virginia Legislature as Liberty Hall Academy. In gratitude for financial support received from George Washington, its trustees changed the name to Washington Academy in 1798 and to Washington College in 1813. Robert E. Lee served as president from 1865 until his death in 1870, whereupon the institution became Washington and Lee University.

Washington and Lee University is relatively small (1,907 students in 1987) and privately endowed. It offers undergraduate education in the liberal arts and sciences, and, since 1866, professional education in law. The university confers Bachelor of Arts, Bachelor of Science, and Juris Doctor degrees.

Washington and Lee University is involved in instruction, research and public service activities. In its undergraduate divisions—the College and the School of Commerce, Economics, and Politics—some 80 percent of its effort is in instruction, 10 percent in research, and 10 percent in public service. There is no plan to modify this balance.

In the School of Law, the ratios for instruction, research and public service are approximately 70, 20 and 10 percent, respectively. The Frances Lewis Law Center, an integral part of the School of Law, began its operations in 1978, stimulating and supporting research in law reform.

At the undergraduate level, Washington and Lee offers courses and majors in 35 academic disciplines. In addition to majors in the traditional arts and sciences, majors are also offered

in business administration, journalism and communications, computer science, and a variety of interdisciplinary studies. Courses, but no majors, are offered in area studies, education and engineering. The University has cooperative programs with several engineering schools through which students acquire a Bachelor of Arts or Bachelor of Science degree at Washington and Lee and later, an engineering degree at the cooperating institution. There is no plan for graduate programs other than the program in law.

During the next ten-year period, the University expects to increase its emphasis and support in the areas of fine arts, journalism and communications, education, computer and information sciences, and interdisciplinary studies.

The university considers itself a national institution and attracts students in significant numbers from throughout the nation. However, because of the number of Virginians enrolled (23 percent in 1986) and its many close associations within the state, it looks upon Virginia as

its primary area of service.

For many years an all-male institution, Washington and Lee now enrolls men and women in both its law school and its undergraduate programs. Virtually all students are full-time. The atmosphere is residential, although a majority of the students live in private accommodations in the community.

Washington and Lee University recently completed the renovation of its historic front campus which was listed in the National Register of Historic Places in 1972. Work on the Gilliam Admissions House was to be completed in fall 1987. Once the Admissions House is completed, all historic buildings at the university will have been renovated. The university was also finishing the 247-bed Gaines Residence Hall. The university is planning construction of a new Center for the Performing Arts. When finished the new center will house a 425-seat theatre, an experimental theatre, faculty offices, and a lobby that also will serve as an art gallery.

